

# Pacific Seabird Group



## BULLETIN

Volume 19 Number 2

1992



## **Dedicated To The Study And Conservation Of Pacific Seabirds And Their Environment**

The Pacific Seabird Group (PSG) was formed in 1972 out of a need for better communication among Pacific seabird researchers. The Group coordinates and stimulates the field activities of members involved in research and informs its members and the general public of conservation issues relating to Pacific seabirds and the marine environment. Group meetings are held annually and the PSG *Bulletin* is issued biannually. Current activities include involvement in seabird sanctuaries, coastal surveys, seabird/fisheries interactions, and legislation. Policy statements are issued on conservation issues of critical importance. Although PSG's primary area of interest is the west coast of North America and adjacent areas of the Pacific Ocean, it is hoped that seabird enthusiasts in other parts of the world will join and participate in PSG. PSG is a member of the U. S. Section of the International Council for Bird Preservation. Annual dues for membership are \$15 (individual and family); \$10 (student, undergraduate and graduate); and \$450 (Life Membership, payable in five \$90 installments). Dues are payable to the Treasurer, whose address is on the back cover.

### **Pacific Seabird Group *Bulletin***

The Pacific Seabird Group *Bulletin* (ISSN 0740-3371) is published twice a year, in the spring and fall, and contains news of interest to PSG members, including regional seabird research and conservation news and abstracts of papers presented at the annual meeting. The Pacific Seabird Group *Bulletin* is not an outlet for the results of scientific research; however, articles and shorter items on seabird conservation, seabird research activities, and other topics related to the objectives of PSG are welcome. All materials should be submitted to the Editor. Back issues of the Bulletin may be ordered from the Treasurer; please remit \$2.50 each for issues of Vols. 1-8 (1974-1981) and \$5.00 each for issues of Vol. 9 and later.

### **Permanent Address**

Pacific Seabird Group, c/o Point Reyes Bird Observatory  
4990 Shoreline Highway, Stinson Beach, CA 94970

### **Donations**

The Pacific Seabird Group is a nonprofit corporation organized under the laws of the State of California. Contributions to the Pacific Seabird Group qualify for tax deductions under IRC Section 501(c)(3).



# Pacific Seabird Group Bulletin

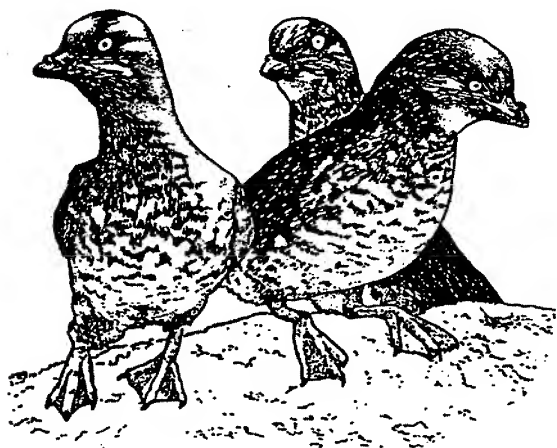


*Dedicated to the study and conservation of Pacific seabirds and their environment*

Volume 19

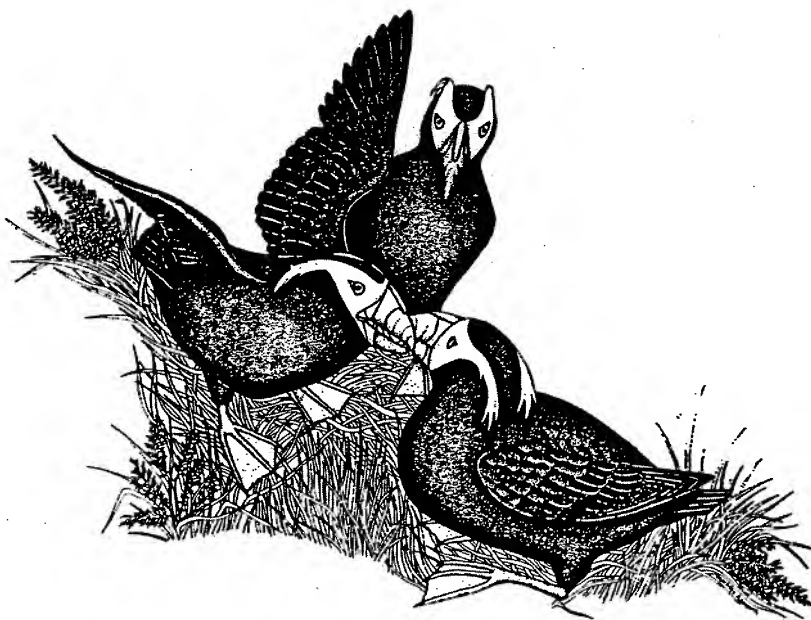
1992

Number 2



- 3     **Seabird Monitoring in the Pacific**  
*An attempt to plan and promote seabird monitoring on an international basis*
- 5     **The Billion Dollar Trust Fund**  
*Money to restore Alaska's natural resources*
- 7     **Proposed Changes to Bylaws**
- 15    **In Memoriam**  
*PSG remembers Bryan Obst and Bill Drury*

- 2     **Letters**
- 18    **Regional Reports**
- 22    **Minutes of the Midyear  
Executive Council Meeting**
- 23    **Marbled Murrelet Update**
- 27    **Nominations**
- 29    **Other Seabird News**



# LETTERS

Dear PSG Members,

The summer is now but a memory and the fall migrants are rapidly appearing. It's been a busy and productive summer. The Midyear Executive Council Meeting was very worthwhile. We gained a much better understanding of the status and funding for the Victoria Symposium, and we were very relieved that PSG would not have to provide any more funding for the publication than the proceeds from the Victoria Symposium. Other issues we discussed can be found in the Minutes of the Midyear Executive Council Meeting in this issue of the Bulletin.

Speaking of the Bulletin, have you noticed all the improvements? Bulletin editor Martha Springer and George Divoky have spent considerable time and effort to bring about these much needed changes, and they promise more to come. Many thanks to both of them for a job well done.

The recent listing of the Marbled Murrelet is the culmination of a great deal of effort on the part of several PSG members. Our organization can be very proud of itself and its members for the role played in calling attention to the plight of the murrelet and for the formation of the Marbled Murrelet Committee, which has outlined research needs and goals, addressed murrelet conservation issues, and developed a protocol for surveying murrelets in inland coniferous forests. A special thanks goes to Chair Kim Nelson and all the members of the committee—this group really stood up to be counted.

Please note that your vote on the proposed revision of the Bylaws is needed. The revisions affect your representation on the Council and are based on Ken Warheit's questionnaire of last year and our discussions at the Charleston annual meeting. Please look for the proposed revisions to the Bylaws and the ballot in this issue of the Bulletin, then read about the changes and cast your vote.

In June I had the pleasure of nominating PSG member Jim King to the Public Advisory Group for the Exxon Valdez Oil Trustee Council. This council decides how the one billion dollars in restoration trust funds will be spent. PSG has gone on record for potential restoration alternatives, all for the betterment of the seabird resource. News received just before going to press is that Jim King was appointed to the Group. The slot he filled was the only one available for a conservationist. PSG, especially Conservation Chair Craig Harrison, was instrumental in securing this appointment. Thanks Craig!

I would like to encourage everyone to attend the 20th Annual Meeting in Seattle, February 9-13, 1993. The local committee of George Divoky, Ellen Chu, and Lora

Leschner are working hard to provide a meeting that will be special in many ways. See you there.

Palmer Sekora, Chair

Congratulations on the PSG Bulletin. It was interesting, even provocative (last page). I confess it is the first time I ever re-read a PSG zcover to cover. Keep it up.

David Cameron Duffy

It is well documented that during the early 1960s thousands of seabirds did indeed die each year on the great array of antennas at Eastern Island, Midway Atoll. Protests at the time were numerous and widespread, but it was obsolescence of the communication system that eventually brought the masts down in 1967; that is hardly news.

It is news that thousands of seabirds have recently died each year on antennas at Midway (Regional Reports, PSG Bull 19:25). Certainly the ugly tangle of rusting girders and cables on Eastern Island trapped young birds, but I never imagined mortality in the order of thousands. It must have been the best kept secret for years.

W. L. N. Tickell, University of Bristol

Dear PSG Members,

I received many positive comments on the spring issue of the zI, and I want to thank all of you for taking the time to write or call. I also want to let all of you contributors know that I am saving the disks you send and they will be available at the Annual Meeting. Please keep in touch with your ideas and suggestions.

Martha Springer, editor





# Seabird Monitoring in the Pacific

Scott A. Hatch

At the annual meeting held in Charleston, Oregon in January 1992, the Executive Council established a Standing Committee on Seabird Monitoring. The committee's goal is to establish better communication among people engaged in seabird monitoring throughout the Pacific region. In the United States, this requires participation by those working in all five Pacific states (Alaska, Washington, Oregon, California, and Hawaii). The committee also has representation and seeks active input from other North Pacific rim countries including Mexico, Canada, Republic of Russia, China, and Japan. The list of current committee members appears below.

The committee defines seabird monitoring as the accumulation of time series data on any aspect of seabird distribution, abundance, demography, or behavior. Basic studies include annual or less frequent measures of numbers and/or breeding productivity; less commonly they generate indices of marine habitat use, phenology (timing of events in the annual cycle), food habits, survival (as in mark-resighting studies), or mortality (as in replicated beached bird surveys). As the results of fisheries biology (stock assessment and catch data) and physical oceanography (e.g., satellite remote sensing of ocean dynamics) become evermore sophisticated and available, these disciplines will provide a crucial complement to seabird monitoring in the Pacific. The committee considers the furtherance of interdisciplinary studies a part of its long-term mission. For now, we are most concerned with improving contacts and cooperation within the community of Pacific seabird observers.

The value of monitoring Pacific seabirds is two-fold. On one hand, wildlife managers are concerned about the welfare of particular species and populations that may be affected by human use of coastal lands and marine resources. But equally important—and quite aside from any value placed on this particular group of animals—is the role that seabirds can serve as indicators of environmental change. There is ample evidence that seabirds respond manifestly to climatic variations (e.g., El Nino-Southern Oscillation and lesser oceanic and atmospheric events), which enhances the relevance of seabird monitoring in an era when global climate change is a growing concern. In addition, fishery managers are realizing that seabirds can serve as cost-effective samplers of fish stocks.

Seabird monitoring is most effective when it incorporates planned comparisons. For example, paired observations on surface feeders and divers are often revealing, as

are studies targeting different trophic levels (piscivores vs. planktivores) or species with contrasting foraging areas (inshore vs. oceanic feeders). Most importantly, our ability to interpret and apply the results of seabird monitoring is greatly enhanced by having broad geographic coverage for the species we choose to observe, even at the expense of detail from site-specific studies. Ideally, a few widespread species should be monitored throughout their ranges in the Pacific, which requires an internationally coordinated effort.

Thus, it is clearly desirable to plan and promote seabird monitoring on an international basis, and to strive for consensus on an overall strategy, species, parameters, and places to include in a Pacific-wide program. With the cooperation of seabird specialists throughout the region, the committee will **COORDINATE** seabird monitoring by evaluating the adequacy and comparability of methods in use and making recommendations as to species, sites, and population parameters to include in an overall Pacific monitoring program. It will **DISSEMINATE** results. The committee will solicit and compile annual updates from ongoing population studies and incorporate them in a common database designed for trend analysis. It will then distribute data compilations to system shareholders on an annual basis and by special request. The committee will **PROMOTE** seabird monitoring among the appropriate authorities and agencies in participating countries, states, and provinces. For example, timely and accessible results from seabird monitoring (as above) can be used to reinforce the idea that every small contribution is a significant part of the larger picture. Finally, the committee will **FOSTER** geographically broad approaches to seabird monitoring and encourage planned comparisons to enhance the role of seabirds as indicators of large-scale change in the Pacific marine environment.

The objective of compiling and disseminating results of seabird monitoring requires some explanation. We envision a system that allows each contributor to benefit from having ready access to the large body of information generated annually on seabird responses to environmental variation in the Pacific. Typically, much of this information is never published in the open literature, or publication lags far behind the gathering of data. A system that consolidates and distributes information on a timely basis—ideally, within a few months after completion of each summer field season—would allow investigators to formulate and test hypotheses or make decisions about study emphasis in



# Seabird Monitoring

something more nearly approaching "real time." We recognize and understand, however, the reluctance of many investigators to turn over their hard won data to any kind of central repository in advance of publication. Thus, use of the proposed system would be governed by rules that protect contributors from unauthorized or preemptive publication of their data.

Creation of such a database, containing quantitative results of seabird monitoring, is not the immediate goal of this committee's work. Rather, we see a need to conduct a thorough inventory of past and present effort to monitor Pacific seabirds—which species have been monitored, where, what parameters have been measured, and who has done the work? Updated on an annual basis, this information will permit a continuing evaluation of where we have been in seabird monitoring, where we would like to go, and what we need to do to get there. Think of this activity as an effort to "monitor the monitoring program" for Pacific seabirds. It should be possible to put seabird monitoring on a better footing financially by demonstrating to funding agencies how their particular contributions fit into an integrated program.

During 1992 the Seabird Monitoring Committee is conducting a mail survey of investigators to develop, we hope, a complete catalog of past and present monitoring efforts for Pacific seabirds. Anyone with relevant information who has not received a questionnaire is urged to contact the committee member in their region. We plan to collate all the information received and provide a report of this survey to participants and the general membership in 1993. The committee will convene at the annual meeting in Seattle, 9-13 February 1993. We encourage all interested members to attend and to express their views and ideas on this committee's goals and means to achieve them.

## PSG STANDING COMMITTEE ON SEABIRD MONITORING

### Current Delegates - 1992-1993

#### MEXICO

Vacant

#### HAWAII

Beth Flint, U.S. Fish and Wildlife Service  
300 Ala Moana Blvd., Room 530  
P.O. Box 50167, Honolulu, HI 96850 USA.  
Phone: 808-541-1201 FAX: 808-541-1216

#### CALIFORNIA

William J. Sydeman, Point Reyes Bird Observatory  
4990 Shoreline Highway, Stinson Beach, CA 94970 USA.  
Phone: 415-868-1221 FAX: 415-868-1946

#### OREGON

Roy Lowe, U.S. Fish and Wildlife Service  
2030 S. Marine Science Drive, Newport, OR 97365 USA.  
Phone: 503-867-4550 FAX: 503-867-4551

#### WASHINGTON

David R. Nysewander, Washington Department of Wildlife,  
Wildlife Management Division  
600 Capitol Way N., Olympia, WA 98501-1091 USA.  
Phone: 206-664-9348 FAX: 206-586-0248

#### BRITISH COLUMBIA

Gary W. Kaiser, Canadian Wildlife Service  
P.O. Box 340, Delta, British Columbia, V4K 3Y3, Canada.  
Phone: 604-946-8546 FAX: 604-946-7022

#### ALASKA

G. Vernon Byrd, U.S. Fish and Wildlife Service  
2355 Kachemak Bay Drive, Homer, AK  
Phone: 907-235-6546

#### RUSSIAN FAR EAST

Alexander Ya. Kondratyev, Academy of Sciences, Institute of  
Biological Problems of the North  
K. Marx Str. 24, 685000, Magadan, Russia.  
Phone: 2-29-65 FAX: 2-47-30

#### JAPAN

Vacant

#### CHINA

Vacant

#### COMMITTEE CHAIR

Scott A. Hatch, U.S. Fish and Wildlife Service,  
1011 E. Tudor Rd., Anchorage, AK 99503 USA.  
Phone: 907-786-3529 FAX: 907-786-3636



# THE BILLION DOLLAR TRU\$T FUND

*Craig S. Harrison, Vice-Chair for Conservation*

The grounding of the *Exxon Valdez* in Prince William Sound, Alaska, in March 1989 spawned one of the greatest frenzies of environmental litigation in the history of the United States. Eleven million gallons of crude oil spread over a large area and contaminated islands, beaches and bays in Prince William Sound, the Kenai Peninsula, the Cook Inlet, the Kodiak Archipelago, and the Alaska Peninsula. The oil or its effects killed some 400,000 seabirds and severely damaged other natural resources. PSG members who wish to apply Deep Throat's dictum and "follow the money" may be interested in the following summary of the establishment of the \$1 billion trust fund to restore Alaska's natural resources.

In October 1991, a federal judge approved an agreement that settled the claims of the federal government and the State of Alaska against Exxon and its subsidiaries for various criminal violations and for recovery of civil damages resulting from the *Exxon Valdez* oil spill. Exxon entered a guilty plea to federal criminal charges and admitted violating the Migratory Bird Treaty Act, Clean Water Act, and Rivers and Harbors Act. The sentence included a \$150 million fine, \$125 million of which was forgiven due to Exxon's cooperation during the cleanup and environmental precautions taken since the spill. Exxon paid the remaining \$25 million into the North American Wetlands Conservation Fund and the Victims of Crime Act account.

Exxon also agreed to pay \$50 million to the federal government and \$50 million to Alaska as restitution for the criminal violations. The state and federal governments will separately manage the \$50 million payment that each has received. The court ordered that these funds be used exclusively for restoration projects within Alaska relating to the *Exxon Valdez* oil spill. The court defined restoration to include "restoration, replacement, and enhancement of affected resources, acquisition of equivalent resources and services; and long-term environmental monitoring and research programs directed to the prevention, containment, cleanup and amelioration of oil spills."

Exxon, the U.S., and Alaska also entered into a \$900 million civil settlement agreement for damages for injuries to natural resources and the restoration and replacement of natural resources. The Agreement and Consent Decree details the settlement of the civil claims among the U.S., Alaska, and Exxon. Exxon agreed to pay the U.S. and Alaska \$900 million over ten years, according to the following schedule: December 1991 (\$90 million), December 1992 (\$150 million), September 1993 (\$100 million), and

\$70 million each September for the eight years beginning September 1994. Exxon will deposit these funds with the federal court in an interest bearing account. The court will disburse funds when the Trustees request that they do so. Presumably the court retains authority to reject requests for payments that are beyond the terms of the Agreement.

The U.S. and Alaska are co-trustees and shall use the funds for the purposes of "restoring, replacing, enhancing, rehabilitating or acquiring the equivalent of natural resources injured as a result of the *Exxon Valdez* oil spill or the reduced or lost services provided by such resources." The Trustees also may use the money to reimburse expenses the governments have incurred due to the oil spill. The major points of the Agreement are:

- \* all decisions shall be made by the unanimous agreement of the six Trustees;
- \* the Trustees shall establish procedures for meaningful public participation, including a public advisory group;
- \* the Trustees "shall jointly use all natural resource damage recoveries for purposes of restoring, replacing, enhancing, rehabilitating, or acquiring the equivalent of natural resources injured as a result of the Oil Spill and the reduced or lost services provided by such resources"; and
- \* all natural resource damage recoveries will be expended on restoration of natural resources in Alaska unless the Trustees unanimously agree that spending funds elsewhere is necessary for effective restoration.

The Trustees are responsible for making all decisions regarding funding, injury assessment, and restoration. The Alaska trustees are the Commissioner of the Department of Environmental Conservation, the Commissioner of the Department of Fish and Game, and the Alaska Attorney General. The federal trustees are the Secretary of Interior, the Secretary of Agriculture, and the Administrator of NOAA, but authority is usually delegated to another agency employee. The Trustees appointed an interim Administrative Director and a Restoration Team to take on the day-to-day management and administrative functions for implementation of the restoration program. The Trustees will



## Settlement (Continued)

approve the hiring of a permanent full-time Administrative Director to chair and support the Restoration Team.

Public participation in the restoration process is an integral part of the Agreement. The Trustees are in the process of establishing a public advisory group that will include the following interests: aquaculture, commercial fishing, commercial tourism, sport hunting and fishing, conservation, environmental, forest products, local government, Native landowners, recreation users, subsistence, and scientific/academic.

### PSG Comments on Alaska Oil Spill Restoration Plans

*Craig S. Harrison, Vice-Chair for Conservation*

In June 1992, PSG sent the Trustees of the Exxon Valdez oil spill trust fund written comments on their Restoration Framework, their 1992 Draft Work Plan and their Solicitation for Suggestions for the 1993 Work Plan. These plans direct the expenditure of some of the \$1 billion that is to be used to restore Alaska's natural resources. Besides generally supporting the damage assessment and restoration projects that the Trustees funded for 1992, PSG urged the Trustees to provide substantial funds to eliminate foxes, rats and other predators from present and former seabird colonies. PSG also suggested that the Trustees evaluate PSG's list of islands and other habitat that might be purchased to conserve seabirds.

Members who wish to obtain copies of any of the following documents should contact the Oil Spill Public Information Center at (907) 278-8008:

- \* natural resource damage assessment and restoration plans (1989, 1990, 1991)
- \* 1991 restoration study plans
- \* restoration reports and bibliographies
- \* 1992 work plan
- \* restoration framework
- \* settlement documents.

PSG has nominated James G. King, a resident of Juneau, to be a member of the advisory group. Jim is one of PSG's founders and his expertise in public lands and natural resource management in Alaska encompasses some 43 years. Since retiring in 1983 from his position as Supervisor, Alaska Waterfowl Investigations, U.S. Fish & Wildlife Service, Jim has continued his biological research, including publication and presentation of technical papers at biological meetings. We are delighted to learn that the Trustees selected Jim in late October to be a member of the public advisory group in the conservation category. Congratulations Jim!





# Proposed Changes to PSG Bylaws

Dear PSG Member,

The following are proposed changes to the Pacific Seabird Group Bylaws. These proposed changes have been developed by the 1991 and 1992 PSG2000 and Bylaws Committees, and are, in part, a direct result of the PSG2000-membership discussions at the Monterey and Charleston annual meetings. Because most of the members attending these two annual meetings participated in these discussions, the following proposed changes to the Bylaws reflect the ideas of a good many members of this society.

The proposed changes have already been approved by the PSG Executive Council, but require a majority vote of the general membership before they can be accepted. Please read the following carefully, and vote to accept or reject these proposed changes. Although you are voting for the entire package, as a whole, if you have a problem with a particular change, you can express this objection in the space provided on the accompanying, self-addressed ballot. Please participate, and please return the enclosed ballot within 30 days of receiving this *Bulletin*. Return ballots to:

Kenneth Warheit, Treasurer  
8205-E Martin Way NE  
Suite 238  
Olympia, WA 98516-5769

The proposed changes to Bylaws are presented in the following format:

Text in Times-Roman typeface is unchanged text from previous Bylaws

~~Text in Times-Roman typeface that has been "redlined"~~ is deleted text from previous Bylaws Text in  
Courier typeface is new text added to this draft of Bylaws

Therefore, you will be voting on text that is in ~~Times-Roman typeface that has been "redlined"~~ and text  
that is in Courier typeface

## DRAFT

### BYLAWS OF THE PACIFIC SEABIRD GROUP (As Amended through xx XXX 1992)

#### Article I. Name, Objectives, and Composition

Section 1. Name. The name of this organization shall be the Pacific Seabird Group.

Section 2. Objectives. The objectives of the Group are exclusively scientific, educational, conservational, and nonprofit. In furtherance of these objectives, the Group's principal activities will be (1) to increase the amount and quality of scientific research on Pacific seabirds, (2) to educate the Group's members and the general public of the importance of Pacific seabirds and their environment, (3) to disseminate publications and other information to accomplish this end, and (4) to advocate for the conservation of Pacific seabirds wherever they occur.

Section 3. Composition. The Pacific Seabird Group shall be composed of those persons, regardless of sex, race, religion, or nationality, interested in Pacific seabirds and/or their environment.

#### Article II. Membership

Section 1. Membership Status. Membership in the Group shall be open to all persons interested in Pacific seabirds and/or their environment. Membership categories shall be: (1) Individual Member, (2) Student Member, (3) Family Member, (4) Sponsored Member, and (5) Life Member.



## Bylaws (Continued)

---

Section 2. Dues. Annual dues shall be paid by all members, except Sponsored Members and Life Members, according to the provisions set forth in Article II, Section 3. The amount of annual dues shall be ~~approved~~ set by a majority vote of the Executive Council, as needed to meet the financial requirements of the Group, and approved by a majority vote of the general membership ~~and payable in advance by January of each year~~. Annual dues for each calendar year shall be payable by 31 December of the previous year, and shall be in arrears if not paid by 31 March of the current calendar year, provided that the Treasurer has sent the member one notice of indebtedness. Annual dues for Student Members shall be set at two-thirds to three-fourths the amount of Individual Members. The annual dues for Sponsored Members shall be paid by that member's sponsor.

Section 3. Life Membership. Life members shall be exempted from all further dues provided the member has paid in full the total Life Membership dues. Dues for Life Members shall be set at 30 times the annual dues, payable in one to five consecutive annual installments.

### Article III. ~~Organization~~ Executive Council

Section 1. Composition. The Group shall be governed by a board of directors called the Executive Council composed of six Officers, eight Regional Representatives, and the Editor of the Group's regular serial publication.

Section 2. ~~Clause B~~. Duties. The Executive Council will pursue such policies and principles as shall be in accordance with the provisions of these Bylaws. The Executive Council, by a majority vote, shall have the power to fill, for unexpired terms, vacancies occurring in its membership; recommend changes in the Bylaws; develop objectives, policies, and programs; perform such other duties as are prescribed herein; and may assign to the Chair any responsibilities authorized to it by the Bylaws.

#### Section 3. ~~ARTICLE IV~~. OFFICERS

Clause A ~~Section 1~~. Officers. The Officers of the Group shall be the Chair, the Chair-Elect, the Past-Chair (the Chair from the previous year), the Vice-Chair for Conservation, the Secretary, and the Treasurer. Any member in good standing may be elected to an office. The Executive Council, with the exception of the Officers, will serve as a nominating committee for the election of new Officers. The Officers will be elected by a majority vote of the membership in an election held at least 30 days before the annual meeting. ~~Officers will serve for the succeeding year~~. Terms for all newly elected Officers will begin on the adjournment of that annual meeting.

Clause B ~~Section 2~~. Chair. The Chair shall be responsible for executing the objectives, policies, and programs developed by the Executive Council and membership for all those administrative and marginal decisions, duties, and activities normally associated with carrying on the affairs of such an organization. The Chair shall preside over meetings of the Executive Council at the annual meeting and carry out other duties as assigned by, or assumed under, the broad policies of the Executive Council. In the absence of the Chair, or upon an inability to serve, duties shall be assumed by the Chair-Elect.

The Chair shall serve for one year. Specific duties include: Overseeing all activities of the Group; playing a central role in initiating, editing, and distributing PSG policy statements; acting as official spokesperson for the Group; designating people to carry out certain tasks not covered by the duties listed for other officers; chairing the meeting of the Executive Council and/or the full membership; informing the Executive Council of PSG activities; keeping abreast of conservation issues and inform council members when appropriate; and writing an article ~~Chair's Page~~ for each issue of the Group's regular serial publication.

Clause C ~~Section 3~~. Chair-Elect. The Chair-Elect shall be assigned duties by the Chair. The Chair-Elect shall succeed to the office of Chair upon the completion of the Chair's term of office. The Chair-Elect shall serve in the capacity of Chair-Elect for one year. Specific duties include: Acting as Program chair for the annual meeting by requesting, receiving, selecting, and editing abstracts and sending them to the Coordinator of Local Committee for inclusion in the program; and investigating locations for future annual meetings. The Chair-Elect should come



to council meetings with information on the location for the next meeting and a choice of two or three sites for the meeting to be held in two ~~three~~ years.

Clause D. Past-Chair. The Past-Chair is the Chair from the year immediately preceding the current year. The Past-Chair shall be assigned duties by the Chair and serves for one year.

Clause E ~~Section 4~~. Vice-Chair for Conservation. The Vice-Chair for Conservation is responsible for initiation and coordination of conservation related activities of the Group. The Vice-Chair for Conservation is elected for a term of two years, and is not limited to serving only a single term. Specific duties include: Identifying and keeping informed on issues pertaining to the conservation of seabirds; preparing information on high priority conservation issues and distributing that information to the membership and others interested in seabird conservation; acting for PSG as directed by the Chair on priority conservation issues at public forums and through written comments; chairing the Conservation Committee; reporting the activities of the Conservation Committee to the Executive Council at the annual meeting and in at least one of the issues of the Group's publication.

Clause F ~~Section 5~~. Secretary. The Secretary shall be assigned duties by the Chair. The Secretary will be responsible for taking minutes at Group and Executive Council meetings. The Secretary is elected for a term of two years, and is not limited to serving only a single term. Specific duties include: Maintaining a list of publications and organizations to receive notice of PSG meetings and other activities; serving as liaison to coordinator of Local Committee; preparing a notice of request for the nominations of Regional Representatives and sending the request to the members ~~through PSG Bulletin~~; arranging for the printing and mailing of meeting announcements, etc.

Clause G ~~Section 6~~. Treasurer. The Treasurer shall be responsible for all funds of the Group. Assets in the general fund accounts shall be made subject to the single signature of the Treasurer, ~~Chairman, and~~ or other members approved by the Executive Council. The Treasurer is elected for a term of two years, and is not limited to serving only a single term. Specific duties include: Receiving individual or institutional membership applications or subscriptions; receiving requests for back issues of the Group's regular serial publication, etc.; keeping a list of current members and making that list available to the Secretary and the Editor of the Group's regular serial publication ~~on address labels~~; designing and mailing membership renewal notices; maintaining an accounting of PSG funds; receiving receipts for persons authorized to spend PSG money and reimbursing them by check; completing income tax statements and performing other duties relating to PSG's status as a tax exempt group; preparing a Treasurer's report for the annual meeting and the Group's regular serial publication; receiving income from dues and sale of the Group's regular serial publication.

## Section 4 ~~Clause A~~. Regional Representatives.

Clause A. Composition. ~~The number of members on the Executive Council will be 10. The Executive Council is composed of all Group Officers, Pacific Seabird Group bulletin Editor, past Chairs of the three previous years, and o~~ One Regional Representative shall be elected from each of the following eight ~~(11)~~ regions: (1) Alaska and Russia; (2) Washington and Oregon; (3) Northern California, consisting of the following 39 counties: Alameda, Alpine, Amador, Butte, Calaveras, Colusa, Contra Costa, Del Norte, El Dorado, Glenn, Humboldt, Lake, Lassen, Marin, Mendocino, Modoc, Mono, Napa, Nevada, Placer, Plumas, Sacramento, San Francisco, San Joaquin, San Mateo, Santa Clara, Santa Cruz, Shasta, Sierra, Siskiyou, Solano, Sonoma, Stanislaus, Sutter, Tehama, Trinity, Tuolumne, Yolo, and Yuba; (4) Southern California consisting of the following 19 counties: Fresno, Imperial, Inyo, Kern, Kings, Los Angeles, Madera, Mariposa, Merced, Monterey, Orange, Riverside, San Benito, San Bernardino, San Diego, San Luis Obispo, Santa Barbara, Tulare, and Ventura; (5) United States, excluding Alaska, Washington, Oregon, California, and Hawaii; (6) Canada; (7) Pacific Rim, including Hawaii, Latin America, Pacific Islands, New Zealand, Australia, Japan, North and South Korea, Southeast Asia, Taiwan, and China; (8) Old World, including Europe, Africa, and parts of Asia not included in other regions.



## Bylaws (Continued)

---

The Regional Representatives are elected for a term of two years, and is not limited to serving only a single term. Alaska/Russia, Northern California, Old World, and Pacific Rim regions shall elect Representatives every odd-numbered year, and Washington/Oregon, Southern California, United States, and Canada shall elect Representatives every even-numbered year. ~~Alaska, British Columbia and Washington State, Oregon and Northern California (members with Zip Codes starting with 954, 955, and 959-961), Central California (members with Zip Codes starting with 939-953 and 956-958; includes Sacramento, San Francisco, Monterey), Southern California (members with Zip Codes starting with 920-938), Pacific (Hawaii, South Pacific, Asia), Latin America, Northeast (Maritime Canada, New England States, Europe), Southeast (U.S. states and Canadian provinces bordering the Great Lakes), and Inland (all others).~~

Clause B. Duties. Specific duties of the Regional Representatives include: Contacting seabird researchers in their regions at least once a year and reporting ~~all~~ current research in their region in a report to be published in the Group's regular serial publication ("Regional Report"); keeping abreast of marine conservation issues in their regions and reporting at least one of these issues in their Regional Reports; sending to the Chair news articles ~~newspaper clippings~~ on important conservation issues; establishing and maintaining contact with local conservation groups so that PSG is aware of their activities and they are aware of PSG's activities; keeping copies of all correspondence with seabird researchers and conservation groups.

Section 5. Editor of the Group's regular serial publication. The editor of the Pacific Seabird Group's regular serial publication (see Article IX) shall be appointed by a majority vote of the Executive Council. Specific duties include: Contacting individuals and organizations concerning potential articles for the Group's regular serial publication; receiving and editing Regional Reports, articles, bulletin board items, etc. or notes; producing the final copy of the Group's regular serial publication; arranging for the printing and mailing of the Group's regular serial publication.

### Article ~~IV~~ IV. Elections and Appointments ~~Filling to~~ Executive Council Seats

Section 1. Nominations. Before 1 May each year, the Secretary will announce in a Group publication or by card or letter the regional and non-regional seats that will be opening the next calendar year. Nominations for these seats will be received by the Coordinator of the Election Committee until 1 June of the same year (see Article VII for the formation of the Election Committee).

Section 2. Balloting. When at least one member has been nominated for a single regional seat on the Executive Council, the Coordinator of the Election committee will mail a ballot bearing the nominations to all members with residence in the area represented by the seat. Prior approval shall be obtained from said nominees. Thirty days will be allowed for the election ballots to be returned to the Coordinator of the Elections Committee; who will tabulate ballots and inform the Editor of the Group's regular serial publication and other Council members as to the results of the election. Seats representing each region will be filled by the nominees receiving the largest vote for each seat. In the event of a tie, the selection shall be made by a majority vote of the current Executive Council. Vacancies occurring on the Executive Council due to a lack of nominations shall be filled by a majority vote of the Council. Council members elected in this manner need not live in the area they represent.

### Article ~~VI~~ V. Meetings

#### Section 1. Executive Council.

Clause A. Frequency and Notice. The Executive Council shall meet annually at a time and place to be selected by the Executive Council. Executive Council meetings shall be open to the general membership. Special meetings of the Executive Council may be called by the Chair or upon written request of three Executive Council members when it is deemed necessary for the business of the Executive Council. Notice shall be addressed to all Executive Council members at least 30 days before



these meetings. Whenever possible, the time and place of the Executive Council meeting will be announced in a Group publication.

Clause B. Proxies. In the event a member of the Executive Council cannot attend a meeting, the member is authorized to appoint any qualified member of the Group as an alternative, provided that the Chair is notified in writing. The appointment of any alternate to act for a member of the Executive Council shall be recorded in the minutes of the meeting.

Clause C. Quorum. Eight ~~ten~~ members of the Executive Council shall constitute a meeting quorum for the transaction of business.

## Section 2. Group Meetings.

Clause A. Frequency and Notice. Meetings of the Group will be held once a year at such times and places as designated by the Executive Council. Due notice of Group meetings shall be given to all members at least 30 days in advance through a Group publication or by mail to members' last known mailing address.

Clause B. Local Committee. A person or persons will be appointed by the Executive Council for the purpose of arranging a Group meeting at the designated time and place. The specific duties of the Coordinator of the Local Committee shall include: Arranging meeting facilities; producing a meeting announcement, preregistration form, and call for papers; mailing this announcement; forming and coordinating a Local Committee; carrying out activities outlined in PSG meeting instructions; keeping records of all money spent and received; and preparing a budget statement after the meeting.

Clause C ~~B~~. Resolutions. Resolutions proposed for consideration at any meeting of the Group, except for expressions of appreciation, must have prior approval of a majority of the Executive Council.

## Article ~~VH~~ VI. Fiscal Management

Section 1. General. The fiscal affairs of the Group shall be under the supervision of the Executive Council and shall be handled by the Treasurer.

Section 2. Administration of Assets. Income from dues or contributions shall be placed in a federally insured financial institution ~~bank or savings and loan association~~.

## Article VII. Committees

Working committees may be established by Executive Council. The composition, size, purpose, and powers of any such committees shall be provided in writing by the Executive Council. The Chair of the Executive Council shall appoint the Coordinator of each working committee, and shall be ex-officio a member of each committee. The specific duties of the Coordinator shall include: Overseeing all activities of the committee; scheduling and coordinating meetings of the committee; and reporting to the Council the activities and accomplishments of the committee. The Coordinators of the working committees may be removed by majority vote of the Executive Council.



# Bylaws (Continued)

---

## Article VIII. Resolutions and Public Statements

The Executive Council shall, as need arises, formulate and publish statements expressing the position or attitude of the Group on matters coming under the provisions of Article I of these Bylaws. When an issue is ~~known to be~~ highly controversial, with the membership holding widely divergent opinions, the views of the membership shall be solicited by the Executive Council.

## Article IX. Publications

The Group shall issue, under the direction of the Executive Council, a regular serial publication. The Group may also produce additional publications as determined by the Executive Council.

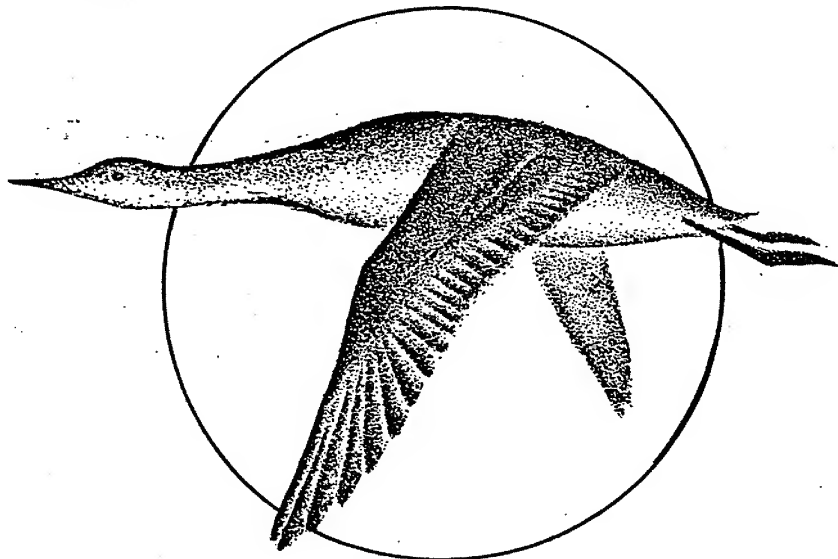
## Article X. Dissolution

Upon dissolution of the Pacific Seabird Group, the Executive Council shall distribute the assets and the accrued income of the Group, as determined by the Executive Council, to one or more organizations ~~which~~ that are organized and operated exclusively for educational and/or scientific purposes and ~~which~~ that have established their tax-exempt status under section 501(c)(3) of the U. S. Internal Revenue Code.

## Article XI. Amendments to Bylaws

Section 1. Origin. Amendments to these Bylaws must be ordered to be submitted to the voting membership for action either by (1) a majority of the members present at any annual meeting of the Group, or (2) a majority of the Executive Council.

Section 2. Adoption. These Bylaws may be altered or amended by a majority vote of the members present at any regular or special meeting of the Group, if advance notice of the proposed changes is contained in the notice of the meeting; provided, however, that any member unable to attend the meeting may request the Secretary in writing before such meeting to register a vote for the member either for or against the amendment in question, and such vote shall be counted with the votes of the members present. These Bylaws may also be altered or amended by a majority of the members who return ballots in response to a proposed amendment, notice of which must have been mailed to all voting members at least 30 days before the close of the ballot. The results of all such ballots shall be filed with the permanent records of the Group.



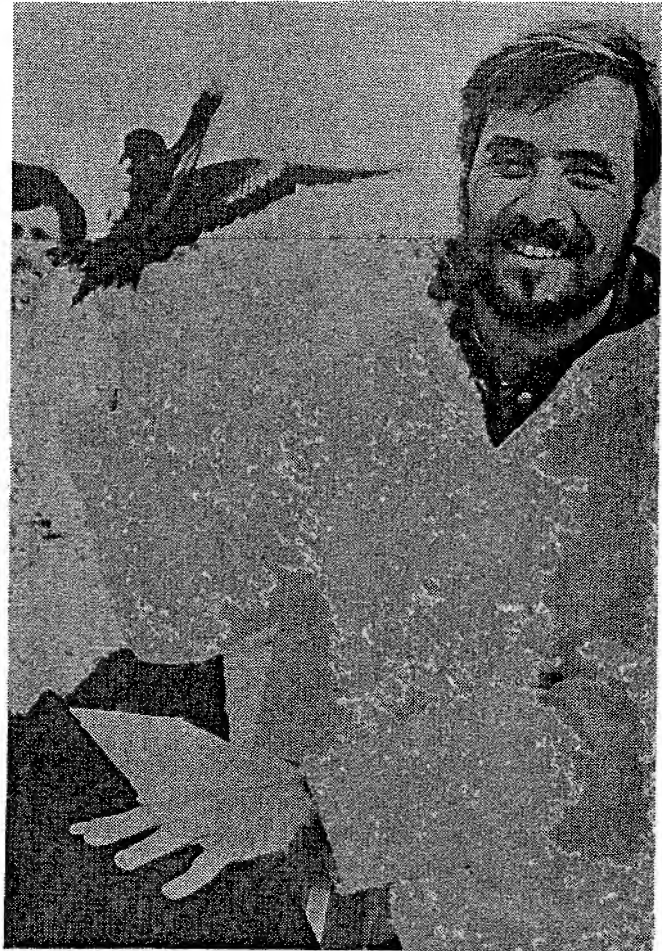


## IN MEMORIAM BRYAN STEVEN OBST (1956-1991)

Our community and our profession suffered a tragic loss on 9 August 1991 when Bryan Obst died after a struggle with pneumonia related to AIDS.

Bryan earned his B.S. in zoology from the University of Florida and his M.A (1983) and Ph.D. (1986) in biology from UCLA. He studied in the labs of Dr. Thomas Howell and Dr. George Bartholomew, and in the tradition of those groups worked on questions concerning physiological ecology and ornithology. His dissertation on the smallest endotherm in the Antarctic was entitled "The Energetics of Wilson's Storm-petrels (*Oceanites oceanicus*) Breeding at Palmer Station, Antarctica." After finishing his doctorate he chose to work as a postdoctoral scholar in the laboratory of Dr. Jared Diamond (UCLA), where he explored intestinal nutrient transport in birds with the goal of applying those physiological techniques to ecological questions. In 1987 he was appointed to the faculty of the Biology Department at UCLA as an assistant professor. Though Bryan was generally interested in the physiology of digestion (publishing papers on chickens, grouse, and geese), the focus of his research remained pelagic birds, their relationship to the marine environment, and their interactions with other marine organisms. In the last five years of his life he was actively involved in the study of Red-necked and Wilson's Phalaropes and their feeding ecology and physiology at Mono Lake. His research spanned many extremes, from the Bering Sea to the Antarctic, from grey whales and Giant Petrels to Least Auklets and Least Storm-petrels. He demonstrated empirically that the distinctive spinning behavior of phalaropes does in fact bring food within their reach, and this was vividly portrayed in a film produced by the UCLA media group. In addition to an active research and teaching schedule, Bryan coordinated monitoring and recovery efforts for the endangered California Least Tern in Southern California.

Bryan was an extremely popular professor, and even as his health declined his enthusiasm for teaching continued to draw new students. He had a gift for seeing the wonder in every aspect of the living world from a



viewpoint uniquely his own. He could be relied upon to notice things completely ignored by the more ordinary observer. He was able to take as much joy from watching common urban birds as he did from rare experiences such as viewing newly hatched Craveri's Murrelet chicks swimming with their parents at dawn in the Sea of Cortez. His colleagues, his many friends, and his family will continue to miss his mischievous wit and piercing insight and regret the loss of what he could have seen and taught us.

*Elizabeth Flint and Margaret Rubega*



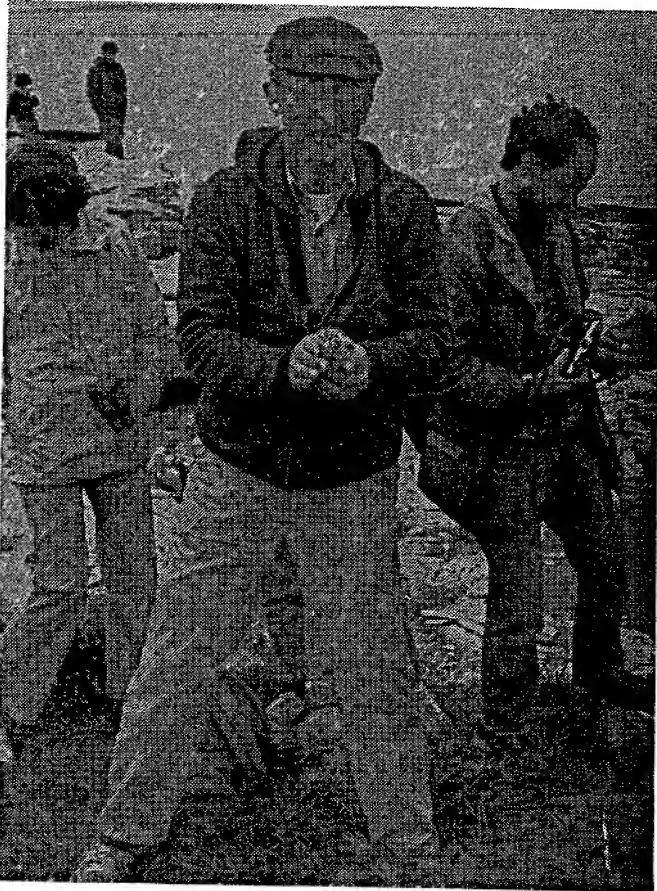
## IN MEMORIAM WILLIAM H. DRURY

William H. Drury, best known to seabird biologists for his work on gulls and terns on the East Coast and his research on murres and black-legged kittiwakes in the northern Bering Sea, passed away at the age of 71 in March 1992. Bill was a member of PSG since the Group's initiation and was an Executive Council member during PSG's formative years.

Bill had a long and distinguished career in scientific research, teaching, and conservation policy. Although he also worked in geology, botany, and human ecology it was seabirds that served as the focus for most of his work. Bill graduated magna cum laude and Phi Beta Kappa in 1942 from Harvard, where he conducted research on terns as part of his undergraduate program. From 1942 to 1945 he served in the Navy, and following the war he returned to Harvard, where he received a Ph.D. in biology and geology in 1952. From 1956 to 1976 he served as director of education and research of the Massachusetts Audubon Society, and he also lectured on evolutionary biology and ecology at Harvard. In 1976 he joined the faculty of the College of the Atlantic in Bar Harbor, Maine, where he continued to teach and do research until the time of his death.

Bill was an important bridge from the museum-oriented taxonomists of the 1940s to the ecologists of the 1960s. His undergraduate research was in ornithology, but he concentrated on botany and geology for his doctorate, largely because ornithology at that time was dominated by taxonomic studies that held little interest for him. After receiving his doctorate he attended the International Ornithological Congress in 1954 and was inspired by European field ornithologists and behaviorists who were using birds to ask important questions in ecology and ethology. Bill then participated in an expedition to Bylot Island in northern Canada where he was able to conduct studies on tundra shorebirds and gulls.

Bill was an early critic of the indiscriminate use of pesticides and served on several environmental panels of the President's Science Advisory Council during the Kennedy and Nixon Administrations. Concern about New England's expanding gull population increased after a plane crash caused by a birdstrike at Boston's Logan Airport in the late 1950s. As a result, Bill studied populations and movements of Herring Gulls for the Federal Aviation Administration during



the 1960s. Bill's work in the northeast also involved restoring tern populations to islands where they had been displaced by gulls; this work reinforced his view that humans should at times take a managed approach to protecting species and habitats. The killing of gulls caused conflicts within the conservation community; Bill's involvement in this controversy and discussions of similar conflicts are addressed in an article in the November 1992 *Atlantic Monthly*. The title of the article, "Weeding the Garden," comes from Bill's observation that "the philosophical question of killing one species to favor another was answered by the early agriculturalists who pulled up plants that inhibited the growth of their crops - they weeded their garden." While at the College of Atlantic, Bill continued his work with tern populations on coastal islands. Bill's work in New England also included assisting with the reintroduction of the Peregrine Falcon to the coast of Maine.

From 1975 to 1980 Bill conducted studies of seabirds in the northern Bering and southern Chukchi seas as part of the Outer Continental Shelf Environmen-



**When your views on the world and your intellect are being challenged and you begin to feel uncomfortable because of a contradiction you've detected is threatening your current model of the world or some aspect of it, pay attention: you are about to learn something. This discomfort and intellectual conflict is when learning takes place.**

*Bill Drury*

tal Assessment Program. The study he began at the Black-legged Kittiwake colony at Bluff in Norton Sound has been continued by Ed Murphy of the University of Alaska and has resulted in one of the largest databases on Alaskan seabirds.

Bill was a compulsive questioner and iconoclast. He saw much of ecology as being dominated by closed-system models and self-organizing principles (density dependence, competition, succession) that were contrary to what he observed in nature. Over twenty years ago he co-authored with Ian Nisbet a paper that challenged the concept of succession in plant communities. Bill realized that once a hypothesis is proposed, its proponents would tend to ignore or treat as exceptions those observations that falsified the hypothesis. Bill noticed that scientists continued to imagine that self-organizing principles and holistic benefits exist in natural "communities" and believed it was due to the insecurity of the human psyche. On the fundamental human need for predictability Bill wrote: "People have universally withdrawn from acknowledging evident confusion and, instead, have asserted that the earth must be an imperfect manifestation of a larger plan. This has led them to depend on shamans, ecologists, or economists to interpret the "plan," which ordinary people cannot recognize."

Bill had the problem of having as his chief dogma the belief that one should avoid dogma. This prevented him from rushing into print with any new or major insights since whatever he believed he had discovered needed to be analyzed for inconsistencies, and he was well aware that the examination would almost certainly modify the original discovery. This approach to science does not lead to a long list of publications but probably does bring one closer to the truth and Bill saw his life as a biologist as an attempt to get to the truth rather than an effort to gain stature in the community of scientists. For this reason his ability to attract funds and recognition was far less than one would expect for someone of his ability.

Bill's desire for getting to the truth was not limited to biology. At a Bering Sea synthesis meeting in the late 1970s Bill sat and chafed while physical oceanographers explained the currents in Norton Sound based on satellite imagery and data obtained from current

meters. When it was time for Bill to give a half-hour talk on bird distribution he began with a ten-minute discussion of how the physical oceanographers had overlooked an area of convergence between Nome and Sledge Island that was known to Bill and everyone else in Nome who had done small boat work in the area. He continued with slides of driftwood and walrus carcass deposition on sandspits that appeared to contradict the findings of the oceanographers. With proper New England decorum he suggested that the oceanographers would do well to take a small boat ride around Norton Sound during their studies rather than simply analyze their images and data tapes. Only then did he proceed with his scheduled discussion of seabirds.

Bill's major impact on science was almost certainly the effect he has had on students, field assistants, and fellow scientists. Over the past fifteen years I have heard numerous stories from people who have told how Bill influenced their career or research by providing advice or encouragement. Some of these influences were major (he served on George Hunt's graduate committee while at Harvard) while many simply involved a long and thoughtful reply from Bill to a letter of inquiry. For a man of his intellect Bill was extremely accessible to others. In addition, the fact that he was not an empire builder and had no scientific turf to defend meant that he was able to provide straightforward advice and insights. His influence was not limited to seabird biologists, however. When Bob Trivers was at Harvard, Bill's discussions with him played a major role in his development as a scientist and the formation of his views on sociobiology.

Early PSG meetings were dominated by people who had recently completed or were still in graduate school, with few people over forty years of age in attendance. In contrast Bill had finished his undergraduate degree before the start of the baby boom and his age and experience were important in raising the level of both scientific and organizational discussions. With the end of the Outer Continental Shelf Environmental Assessment Program and his work in Norton Sound, Bill's attendance at PSG meetings became less frequent as his emphasis returned to New England seabirds. At the time of his death he was working on a book about natural history and ecology. It is being

*(Continued p. 21)*



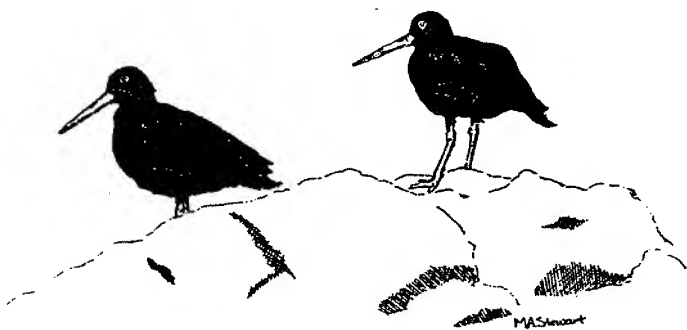
# Regional Reports

## Washington/British Columbia

Julia Parrish of the University of Washington has a grant from the USFWS to continue a study of **Common Murres** on Tatoosh Island. The colony has been rapidly expanding since the early 1980s and conservatively had 3-4 thousand birds in 1991. There were concerns that the July 1991 oil spill from the Tenyo Maru might have significantly impacted the Tatoosh murre population. While 3157 dead oiled murres were recovered in the wake of that spill preliminary analysis suggests that the Tatoosh colony has not changed dramatically. Of 27 spatially separate subcolonies only one was vacant although several sustained losses from 1991 to 1992.

A more serious threat to the murre population is the interaction with raptors, both **Bald Eagles** and **Peregrine Falcons**. These predators, although sporadic in occurrence, cause significant disturbance of the largest subcolonies leading to colony evacuation during the early part of the nesting season. The unattended eggs and young chicks are easy prey for **Glaucous-winged Gulls** and **Northwestern Crows**. The number and timing of raptor presence on the island determines, to some extent, the reproductive success of murres nesting on Tatoosh cliff tops.

A group of conservation societies including the Defenders of Wildlife, Washington Environmental Council, National Audubon Society, and Wilderness Society is suing the Department of Interior and the U.S. Fish and Wildlife Service to stop the use of offshore rocks as practice bombing targets by air force planes from both a nearby air station and aircraft carriers. The bombing of the offshore rocks has been of concern for some time since the rocks are utilized by marine mammals and seabirds. Populations of murres and cormorants on an island adjacent to one of the rocks designated as a bombing target have declined greatly in recent years.



## Central California

Paul Jones, U. S. Environmental Protection Agency, coordinated a largely volunteer effort investigating seabird and marine mammal distribution and abundance in the Gulf of the Farallones. The report is available from him.

Dan Evans is the new Point Reyes Bird Observatory Director. Evans was formerly the Director of the Darwin Field Station at the Galapagos Islands. Sarah Allen is working with David Ainley, Larry Spear, and Bill Sydeman, as they continue to investigate pelagic distribution of seabirds in relation to prey in central California, using GIS and remote sensing techniques. Their study is being conducted in conjunction with the National Marine Fisheries Service.

Mark Rauzon has introduced feline enteritis on Christmas Island with the assistance of the New Zealand and Kiribati governments. This is an attempt to employ biological control for roughly 20,000 feral cats on the island. He will assist with monitoring for its effectiveness. Rauzon reports that the artificial nesting platform at the Kaneohe Marine Corps Air Station in Oahu supported five nesting attempts and produced at least three chicks.

Steve and Stephanie Singer of the Santa Cruz City Museum of Natural History, working in cooperation with David Suddjian and a team of volunteer biologists, have found another **Marbled Murrelet** nest in Big Basin Redwoods State Park. This year's nest was found in a different branch of the same old-growth redwood tree where murrelets nested successfully in 1991. This is the first recorded occurrence of murrelets nesting in the same tree used in the previous year. The young murrelet fledged successfully on the night of June 7, 1992.

The Santa Cruz Mountains Murrelet Group, with assistance from the Sempervirens Fund, has begun a two year project to locate new areas of potentially suitable breeding habitat in the Santa Cruz Mountains. Old growth forest stands will be surveyed at dawn for evidence of murrelet usage. Results of the study will be presented after completion of the 1993 breeding season.

For the second year, lack of funds has prevented the completion of aerial surveys of **Common Murre** breeding populations at Farallon NWR and other colonies in central and northern California. The Refuge will seek other sources of funding for future surveys.

This has been the first seabird breeding season (1992) with boat restrictions in place at the Farallon Islands. Restrictions include seasonal closures (March 15 to August



# Regional Reports

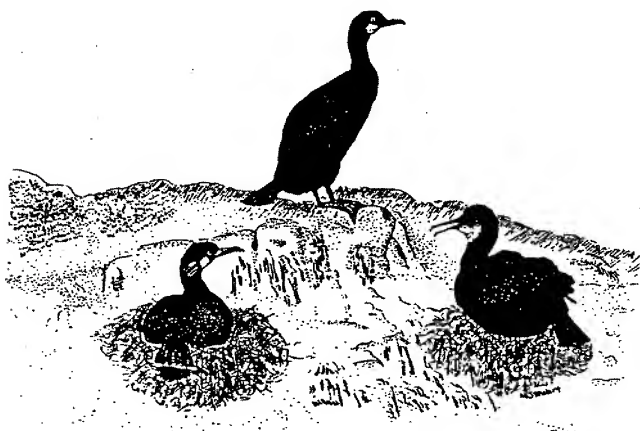
## Pacific

15) to boat traffic within 300 feet of most of the islands, speed limits for all boats (5 mph within 1000 feet of islands, and noise restrictions for commercial dive boats engines and compressors. Regulations were designed to provide improved protection to seabirds and marine mammals, particularly to **Common Murres** and **Steller sea lions**. The effectiveness of these regulations will be reevaluated annually. So far, there appears to be a marked reduction in disturbance, with the majority of boats respecting restrictions, as reported by PRBO biologists.

Refuge biologists are working with PRBO to begin evaluating the effectiveness of predator exclosures around **Snowy Plover** nests at Salinas River NWR and many other sites along Monterey Bay. The Refuge will use this evaluation to determine whether further predator management is warranted.

**Frank Gress** continues to monitor reproductive success of **Brown Pelicans** in the Southern California Bight. Productivity in 1992 was worse than any year since 1978 and is the fourth year in a row of poor breeding success. His long-term monitoring project on **Brown Pelicans** at Anacapa Island includes food studies and breeding biology investigations. He is also monitoring **Brandt's Cormorants** and **Pelagic Cormorants** and is studying the effects of the El Nino on seabirds of Anacapa Island. Gress is writing up the results of pollutant studies on **Brown Pelicans** and **Double-crested Cormorants** that were conducted from 1977-1989, and he is assisting **D. Michael Fry** with egg collections from those species at Anacapa. Gress is also working with **Dan Anderson** on writing up results from the telemetry study on the effects of oiling of **Brown Pelicans**. Data from this study shows that none of the rehabilitated birds returned to the colony to breed following their release.

*Jean Takekawa*



**Andrew Yuen**, Pacific Islands Land Protection Coordinator, U.S. Fish & Wildlife Service, Honolulu, Hawaii, reports that the U.S. Fish and Wildlife Service conducted biological surveys of Palmyra Atoll on September 1987, September 1990, and February-March 1992. These surveys confirm the biological richness and importance of Palmyra Atoll, particularly for seabirds and shorebirds. Based on these surveys and other studies, Palmyra Atoll supports the largest colony of the **Red-footed Booby** in the central Pacific. Palmyra Atoll also supports large colonies of the **Brown Booby**, **Black Noddy**, and **Sooty Tern**. The beaches and tidal flats provide habitat for migratory shorebirds. In particular, the atoll supports relatively large numbers of the migratory **Bristle-thighed Curlew**. Palmyra Atoll is an outstanding biological resource.

Palmyra Atoll is privately owned. Yuen says that landowners have demonstrated an appreciation and sensitivity for the wildlife of Palmyra Atoll and have instituted local conservation measures such as prohibiting the harvesting of coconut crabs and limiting human access to the islets east and south of Cooper Island. Our biological surveys were made possible by the hospitality of the landowners and their agent. The Service has informally discussed with the landowner's agent the potential management of all or part of Palmyra Atoll for the purposes of wildlife conservation. However, these discussions have been preliminary and the Service has not made a decision on the potential management of Palmyra Atoll as a National Wildlife Refuge. We hope to build a dialogue with the landowners and agent regarding the role of the Service in the future planning of Palmyra Atoll.

**Scott Johnston** recently transferred from California to the USFWS office in Hawaii. His new address is USFWS, Pacific Islands Office, P.O. Box 50167, Honolulu, HI 96850. Scott is finishing his thesis work from UCLA on human disturbance of **California Least Terns**. He will be working on a variety of endangered bird recovery issues in Hawaii and the South Pacific.

The USFWS Pacific Islands Office is conducting a status survey of the **Band-rumped Storm-petrel**. The survey was initiated following a petition to list the species as endangered. The USFWS determined that the information regarding distribution, breeding biology, and threats to the population were too scant to warrant listing until further data could be collected. Staff from the Pacific Islands Office and Hawaii Research Group have conducted night



# Regional Reports

and offshore surveys and colony searches on Kauai, Hawaii, and Maui. A summary report on the survey will be used for justification to list the species as endangered. Any information regarding distribution or status of this species is gratefully requested by the USFWS. Please send information or questions to Scott Johnston, USFWS, Pacific Islands Office, P.O. Box 50167, Honolulu, HI 96850. Phone No. (808) 541-2749.

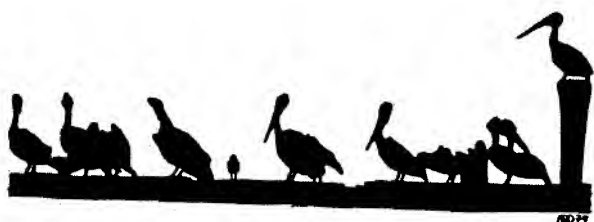
The U.S. Coast Guard removed a 625' LORAN tower from Kure Atoll during July. USFWS biologists worked with the Coast Guard and the State of Hawaii to minimize the impacts of tower demolition on the island's wildlife. This tower has been responsible for the deaths of thousands of seabirds at Kure since it was installed in 1961. The Coast Guard departed the island in August and will return for a final cleanup in 1993.

Rose Atoll National Wildlife Refuge was visited in June and September in order to conduct an ongoing Polynesian rat eradication project. Biologists found one male rat during the June trip and no rats or rat sign during the September visit. We are cautiously optimistic that the rats have been eradicated. The next trip is scheduled for February.

USFWS biologists visited Howland, Baker, and Jarvis islands in the Central Pacific Ocean during June and July. Significant observations from this trip included: Audubon's Shearwaters on Jarvis Island, no cats on Jarvis or Howland Island, and noticeably decreased numbers of nesting seabirds on all islands.

The USFWS field station at Tern Island, French Frigate Shoals, Hawaii recorded major changes in breeding phenology of some seabird species this season. Additionally, Sooty Tern nesting was almost a total failure. The colony of about 70,000 pairs abandoned eggs and early stage chicks. The adults eventually returned to the colony but renesting attempts were not significant. Biologists on Laysan Island also noted more than usual mortality among Black Noddies. An unusual die off of Red-footed Booby chicks occurred on Midway Atoll.

*Ken McDermond*



## Great Lakes

Budgetary limits and a large outbreak of Newcastle Disease Virus (NDV) in waterbirds east of the Rockies has altered much research on the Great Lakes in 1992 and cast many plans for further research "onto the rocks" for the moment. NDV first broke out in **White Pelicans**, cormorants, and a few **Ring-billed Gulls** in Minnesota and North Dakota colonies in young-of-the-year during mid-June. By late June it was identified in the upper three Great Lakes cormorant colonies and later was found in Nebraska, Montana, Alberta, Saskatchewan, Manitoba, and all the way to New York. By mid-July it was clear that virtually all Great Lakes colonies were involved. The pathotype of the virus was later identified as primarily neurotropic velogenic (attacking the CNS primarily and very pathogenic) by USDA scientists. The outbreak eventually involved one domestic turkey flock of 27,000 birds in North Dakota, a flock that was destroyed and burned to quarantine the disease. There was great anxiety that cormorants would transmit the disease to **Ring-billed Gulls** that in turn could vector the disease widely into poultry. Fortunately, this scenario did not develop, and only the single domestic turkey flock was lost.

NDV had a large impact on several research projects that were using cormorants to measure the uptake of toxic chemicals into waterbirds from forage fish across the five Great Lakes. The only prudent course for researchers to follow was to suspend all field collections until the degree of infectivity could be established by USDA laboratory testing. Although as of this date (11/02/92) the degree of threat is still not fully known, some results show that blood samples and food samples collected from infected and exposed birds are not virus-contaminated and thus can be safely handled and analyzed. Unfortunately, the potential degree of NDV as a confounding factor is not known for wild species. Much uncertainty remains about what research activities may be safely pursued in 1993 in the Great Lakes region. A considerable anxiety remains over the possibility of a widespread outbreak in 1993 in **Ring-billed Gulls**, which have a large potential to disseminate this potent pathogen into poultry operations.

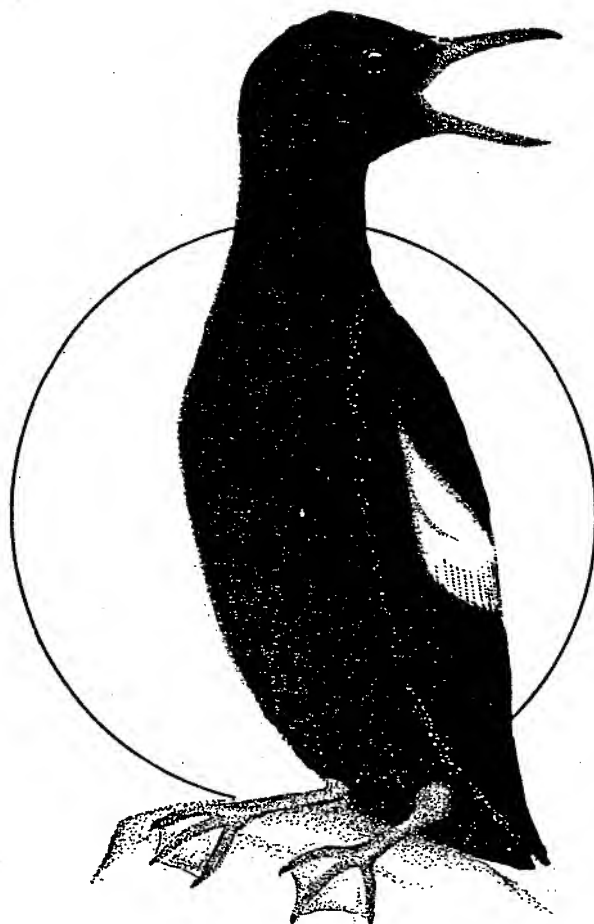
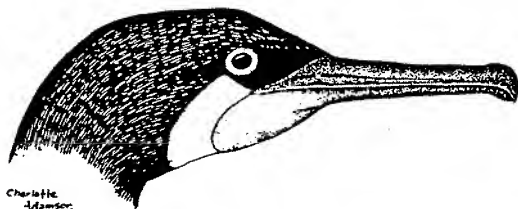
Other research reported in October included the results of work that related contaminant burdens to poor development of competent immune systems in chicks of Caspian Terns and Herring Gulls. Great Lakes shoreline eagles continue to reproduce poorly in comparison to inland eagles. Planar contaminant-caused wasting syndrome was



identified and measured in Caspian Terns and Herring Gulls from one contamination "hot spot." Previous results of contaminant-driven bioeffects research reported in 1989 and 1991 at two cause-effects linkages symposia on toxic contaminants and wildlife populations are now available as proceedings in Volume 33(4) of the *Journal of Toxicology and Environmental Health* and as abstracts of the 1991 symposium from the Michigan Audubon Society, P. O. Box 80527, Lansing, MI 48909. Few concrete research plans for 1993 are in place in the Great Lakes region given the uncertainties presented by elections, the unsuccessful Canadian constitutional referendum, the poor state of the economies, and the presence of Newcastle disease.

One new project of considerable interest to the PSG membership is the just-begun pilot project to assess the presence and impacts of chlorinated hydrocarbon contaminants on the two north Pacific albatrosses. A grant from the USEPA to the World Wildlife Fund, matched with external funds and in-kind efforts of the contractor to WWF will allow this pilot project to move forward using albatrosses at Midway Atoll. Including the pilot year, this effort is expected to take three field seasons and another year of writing and data analysis to be completed. Research will focus on measuring the presence of planar contaminants in the birds, their eggs, and offspring using the newly developed H4IIE EROD bioassay to measure the effect of the contaminants present on enzyme systems and certain biological markers, especially vitamin A and thyroid hormones in these birds. Productivity and the development of immune function in chicks will be measured in years two and three of the field program. Albatrosses were chosen as subjects to assess the impacts on top avian predators in what should be that marine ecosystem in the northern hemisphere with the greatest degree of dilution of these exceptionally toxic contaminants, and because of all species at the top of the food web, albatrosses range over and utilize more of the oceanic surface than other avian species. Because the contractor for this work with the WWF happens to be located in the Great Lakes region (the SERE Group Ltd. of Stockbridge, MI), periodic reports on the progress of this effort will issue from this reporter.

James P. Ludwig



### Drury

(Continued from p. 17)

completed by associates from the College of the Atlantic.

Bill never lost sight of what was really important in life. He once said that he preferred being an ornithologist over a geologist since it was easier to take your family into the field. His proposal to conduct his Alaska field work stated that he would not accept funding if his family could not accompany him. Bill is survived by his wife Mary, four sons, and four grandchildren.

George Divoky, with assistance from John Biderman,  
George Hunt, and Cathy Ramsdell



# Minutes of the Midyear Executive Council Meeting

Submitted by Ellen W. Chu

A midyear meeting of the PSG Executive Council was held on 18 July 1992 in Kirkland, Washington. Chair Palmer Sekora called the meeting to order at 1020. A quorum was present and consisted of Palmer, eight proxies held by Palmer, Chair-Elect George Divoky, Treasurer Ken Warheit, and Past-Chair Mike Fry. Also present were former treasurer Ellen Chu and North Pacific Symposium convenor Kees Vermeer.

After Palmer briefly reviewed the agenda, Kees Vermeer summarized the present status of the proceedings of the symposium, "Status, Ecology, and Conservation of Marine Birds of the North Pacific," (henceforth referred to as the North Pacific Symposium) held in Victoria, BC in 1990. He estimated that the total cost of publishing the proceedings would be \$22,000 (Canadian) for about 1200 copies (about 1000 manuscript pages). The proceedings will contain 25 papers, which are now being edited by the Canadian Wildlife Service in Ottawa. Estimated publication date is March 1993.

The Council was concerned about the cost of publishing the proceedings of the North Pacific Symposium. The members were worried that PSG might have to cover up to \$18,000 of the publication costs. Discussion centered around trying to understand how such a commitment could have evolved. In an attempt to resolve the confusion, Palmer proposed for the record that "it is our understanding that the Canadian Wildlife Service (letter from S. P. Wetmore, A/Regional Director of CWS, dated 28 May 1992) will pay any remainder of the publication costs for the North Pacific Symposium not covered by author's page charges as invoiced by PSG. These include any costs above and beyond the \$5000 Canadian committed by the British Columbian Ministry of Environment, Lands and Parks, and may amount to about \$6000 Canadian. PSG shall be responsible only for the proceeds from its annual meeting in Victoria (\$1815) and for invoicing and collecting page charges from participating authors." Palmer further stressed that PSG must set up guidelines for content and publishing procedure for future PSG-sponsored symposia.

The local committee for the 1993 twentieth anniversary meeting, consisting of George Divoky, Ellen Chu, and Lora Leschner, met in April 1992. George discussed the many plans and ideas for the meeting, which is scheduled to take place in Seattle in February. A contract has been signed with the the Westin Hotel to provide meeting facilities. Funding from the Bullitt Foundation has fallen through, but *BioScience*, journal of the American Institute of Bio-

logical Sciences, has agreed to consider publishing either formal articles or a feature article that might come out of a special symposium on Pacific Northwest seabirds at the Seattle meeting. George talked about the idea of a public session cosponsored by the Seattle Audubon Society and mentioned that we could do a public boat trip led by PSG members. He plans to invite contributions to the special session with a feature article for *BioScience* in mind.

Palmer Sekora updated those present on the U. S. Fish and Wildlife database program. For the past three years or so, participants in this program have met the day before the annual PSG meetings. Participants in the database program will meet again in 1993 with plans to discuss how scientists access the available databases.

The changes in the *Bulletin* under the new editor, Martha Springer, were commented on; reaction was positive.

Referring to his letter to David Gibbons, *Exxon Valdez* Oil Trustee Council, Palmer Sekora alerted the Executive Council to PSG's nomination of James G. King to the Public Advisory Group to the Oil Trustee Council.

Palmer and Ken Warheit spoke about the invitation from Richard C. Banks, President of the Wilson Ornithological Society, to PSG to join the newly formed Ornithological Council, to comprise "representatives of professional scientific societies that would be able to provide a voice for scientific ornithology." Everyone agreed that this question is important enough to be put to the entire Executive Council, and discussion was deferred until the next meeting.

Ken Warheit asked everyone present to read and comment on the PSG bylaws, now being revised, and to get their comments to him by 1 August. The bylaws would then be sent to the entire council for approval.

Council members discussed a letter from Harry Carter to Palmer Sekora about the Marble Murrelet Symposium Proceedings in which he suggested that PSG buy 300-400 copies of the proceedings (published by the Western Foundation of Vertebrate Zoology and sold at \$20 list or \$13 net) in order to resell them at \$17 plus shipping. Concern was expressed about effort versus return and who in PSG would handle the sales.

The meeting was adjourned at 1430 h.





# Marbled Murrelet Update

*S. Kim Nelson, Chair*

## SPECIES STATUS UPDATE

On 20 June 1992, the U.S. Fish and Wildlife Service (USFWS) delayed the listing of the Marbled Murrelet six months, despite a recommendation for threatened status by the USFWS Regional Office. Under the Endangered Species Act (ESA), the USFWS can delay a listing if there is a substantial disagreement among scientists regarding the "sufficiency and accuracy of the data." The USFWS (in this case the Bush Administration) claimed there was a disagreement regarding the definition of a population segment, citing comments from the Oregon Department of Fish and Wildlife (ODFW), Greenpeace, and the Siuslaw Timber Operators. ODFW and Greenpeace supported the listing, but stated that the bird should be listed as endangered in Oregon and California, and listed in Alaska as well as the tri-state area, respectively. These comments did not indicate a disagreement regarding data on the population segment in Oregon, Washington, and California (tri-state area). The comments by the Siuslaw Timber Operators questioned listing the population segment, but presented no data to prove or disprove the contention that the tri-state population was distinct from populations further north.

The Sierra Club Legal Defense Fund (SCLDF) filed a motion on an existing lawsuit following USFWS's six month extension demanding that a decision be made to fulfill deadline obligations under ESA. SCLDF won their motion on 15 September, when Judge Barbara Rothstein ordered the USFWS to make a final ruling by 18 September. She stated that the USFWS had been unlawful, arbitrary, and capricious in their decision to delay the listing. When Rothstein would not back down from her decision, the USFWS went to the Ninth Circuit Court of Appeals to ask for an extension until 22 September so they had time to appeal the decision. This request was granted by the Ninth Circuit on 18 September. On 24 September, three Ninth Circuit Court of Appeals Judges threw the case out of court and upheld Judge Rothstein's opinion that the USFWS (Bush Administration) had been unlawful, arbitrary and capricious in the six month extension. Rothstein then ordered the USFWS to publish their final decision in the Federal Register by noon on 28 September. **THE MARBLED MURRELET WAS OFFICIALLY LISTED AS A THREATENED SPECIES ON 28 SEPTEMBER 1992** (Federal Register 50 CFR, Vol 57:45328-45337, 1 October 1992)!

The Bush Administration added language to the listing package stating that a 90-day study would be conducted to look into the question regarding Marbled Murrelet population segments. It is unclear how the USFWS intends to address this question in 90 days when no new information is available on population distribution and genetics.

## REGIONAL REPORTS

### Alaska

In Prince William Sound, the Marbled Murrelet Restoration Study finished its second field season. Four active murrelet nests, one nest cup (old or unsuccessful nest), and two sites with eggshell fragments were found on Naked Island in 1992. Three of the active nests were in mountain hemlocks and the fourth in a Sitka spruce. None of the nests were successful; predation is suspected at three sites and the fourth was abandoned (egg was retrieved). None of the four 1991 nest sites were reused, although birds were active in the vicinity of two of the 1991 nests, and one of the 1992 nests was near a 1991 nest. A 1991 landing tree was used as a nest in 1992. Data on behavior, vocalizations and general activity levels at occupied sites are being analyzed. The Naked Island team included Nancy Naslund (field supervisor), Irene Manley, George Esslinger and Anne Belleman. Matt Nixon joined them for a week to assist in the tree climbing and documentation of nests. They also conducted bi-monthly at-sea and dawn watch monitoring surveys to track seasonal patterns, and a monthly random at-sea census to estimate the local population.

The second portion of the project looked at dawn activity relative to upland habitat and at-sea densities. In western Prince William Sound, 66 sites were randomly chosen and dawn watches conducted from a vessel or onshore, with an additional 19 areas censused at inland stations. Adjacent shoreline sections were censused by boat following each dawn watch. These data will be analyzed using on-site habitat measurements and forest timber type maps digitized into the GIS system. The mobile team, aboard the MV *Auklet* included Dennis Marks (Field Supervisor), Scott Anderson, Dawn Huntwork. Habitat data was collected in a cooperative venture with the U.S. Forest Service. Kathy Kuletz was P.I. for the project and has submitted a proposal to continue this work in 1993.

A related restoration study conducted dawn watches on Afognak Island (which had very high activity levels), where two nest cups were found in Sitka spruce. While



## Marbled Murrelet (Continued)

training observers on Kodiak Island, Mary Cody (USFWS) also located two active nests in Sitka spruce trees. Don Youkey (USFS) found a nest in a mountain hemlock in eastern Prince William Sound. Private consultants with the USFS found a nest in a hemlock on Prince of Wales Island in southeast Alaska, plus five sites with eggshell fragments or fledglings on the forest floor. Prince of Wales island has been and continues to be heavily logged. Biologists with the Kenai Fjords National Park conducted dawn watches along shoreline sections to lay the ground work for a possible 1993 habitat study. The area tends to be either forested or alpine/glacial moraine, and preliminary results indicate that the forested areas had more dawn activity.

John Piatt assisted Suzann Speckman with her study on the effects of weather, tides and season on murrelet at-sea activity in Auke Bay, near Juneau. Suzann monitored murrelets from land and boat daily throughout the breeding season. Ecological services (USFWS) tested aerial surveys in northern southeast Alaska. Steve Klosiewski and Karen Laing (USFWS) conducted boat surveys in the Juneau/Lynn Canal area and tested the variance among three transect lengths to determine the most efficient method. Hopefully results of all these studies will be applied towards a comprehensive survey of southeast Alaska that we continue to lobby for.

*Kathy Kuletz, U.S. Fish and Wildlife Service*

### British Columbia

Morning counts of Marbled Murrelets were conducted in Mussel and Kynoch Inlets from our fishing vessel in April and May, 1992. We recorded 487 murrelets in Mussel Inlet in May, and 133 murrelets in Kynoch Inlet in mid-April. Last year, 1265 marbled murrelets were counted in Kynoch Inlet in May. These counts indicated that very few birds were entering the inlets from the valley bottom or inflowing rivers. Most birds appeared to be coming down to the inlet from steep, forested slopes along the inlet.

Seven birds were captured and radio-tagged. Five of the birds had brood patches, indicating that they were breeding birds. The two birds that did not have brood patches were not detected following release. Tracking the five birds with brood patches during May and early June indicated that they were nesting; these birds spent 24 hours in the forest, followed by 24 hours on the water feeding. They left and returned to the forest about 1 hour before sunrise.

Three presumed nesting sites were found by locating radio-tagged birds in the forest. Although actual nests were not located, we believe we were within 100 m of the nests, based on the strength and direction of the radio signal.

The first nest site was close to Mussel Inlet in an area of relatively flat cedar swamp. The second nest site was in a stand of hemlock and balsam within the subalpine. The stand was above an area of rugged cliffs and surrounded by cliffs, meadows and avalanche chutes. The third nest site was close to the inlet on a very steep slope in a stand of mixed cedar, hemlock, and balsam. Trees at the nest sites had large mossy platforms on many of the branches, similar to those reported for other Marbled Murrelet nests. Land based surveys did not provide data which might have assisted in locating nests in this rugged, unroaded terrain. We believe that radio-telemetry is the most effective and unbiased method of locating nests in this type of habitat.

*Lynn Prestash, Rick Burns, and Dale Seip  
Ministry of Forests and Canadian Wildlife Service*

Two nests were discovered on Vancouver Island in 1992. One was located in a Sitka spruce in Walbran Valley and the other in a western hemlock in Carmanah Valley. There are now a total of three known nests in the Walbran Valley and one in Carmanah Valley. Murrelet activity patterns were again monitored in these valleys. Both areas contain high numbers of murrelets and continue to be important nesting sites for the murrelet.

*Alan Burger, University of Victoria*

Murrelet activity patterns were monitored for a second season in old-growth forests of the Caren Range, north of Vancouver, B.C. Birds were seen carrying fish inland and landing in trees; however, attempts to locate their nests were unsuccessful.

*Paul Jones, Caren Range, Sunshine Coast*

### Washington

During the 1992 field season, research focused on three main objectives. The first involved trying to define what constitutes suitable Marbled Murrelet nesting habitat. To answer this question we are examining the habitat relationships of Marbled Murrelets to old-growth forests. Specifically, we are trying to identify what structural characteristics of old growth are unique to stands which show an abundance of murrelets compared to stands with an absence or low abundance of murrelets. We are now in the process of looking at 115 vegetation plots throughout murrelet habitat in four major forest associations. These include the Western Hemlock Zone, Douglas-fir Zone, Sitka Spruce Zone, and Silver Fir Zone.

The second objective was to better identify the distribution of murrelets throughout western Washington. Surveys were conducted in areas where murrelets were



suspected to be present, but where a lack of survey effort in the past had created large gaps in the murrelet distribution pattern. These areas included southern Washington, southwestern Washington, and parts of the Olympic Peninsula. The farthest inland summer breeding detections in North America were recorded by field crews in the North Cascades this year. Birds were detected 52.25 miles inland on three different survey mornings.

The last objective was to conduct a pilot study to determine the suitability of modified marine radar techniques developed for bird migration studies to track the movements and behaviors of murrelets at inland forest stands and coastal sites. The USFS Pacific Southwest Research Station, Arcata Redwood Company, and Pacific Lumber Corporation supported the research. Three weeks were spent tracking murrelets in northern California and the data is now being analyzed.

*Tom Hamer and Eric Cummins  
Washington Department of Wildlife*

## Oregon

During the 1992 field season, we began a pilot study to look at the effects of landscape patterns on the distribution and abundance of Marbled Murrelets. The purpose of the pilot study was exploratory in nature and was directed at collecting base-line information for designing a 3-4 year study. Two landscape parameters included in the study were stand size and stand isolation (habitat fragmentation). This year we focused on one cell of the sampling design, small isolated stands (<35 acres), to test the protocol and refine our study design. We determined that one station per 30 acres was ineffective in verifying murrelet occupancy in some study stands, especially those with low murrelet numbers. We also found that murrelets occupy small, isolated stands; however these birds appear to have high site fidelity and may continue to occupy stands after the habitat has been modified. The question to be addressed in a landscape study then becomes one of reproductive success, rather than stand occupancy or murrelet abundance.

We are currently exploring the effect of habitat characteristics on activity levels. However, there are problems in conducting these analyses since murrelet detections are highly variable within and between seasons. For example, detections of murrelets in forest stands in Oregon this season were significantly lower than in previous years in known activity centers. We believe that the El Nino or ENSO event had significant effect on food supplies early in the breeding season (March and April) and thus affected nesting attempts by murrelets. We will address these problems in the design of our 3-4 year landscape study. This

project and others were funded by the U.S. Forest Service, Bureau of Land Management, Oregon Department of Fish and Wildlife, and the U.S. Fish and Wildlife Service.

Although minimal time and effort was allocated to nest searches, we located three new murrelet nests (one with the help of biologists from the Siskiyou National Forest). Two nests were located by finding eggshell fragments on the forest floor; the third was found in one of our pilot study sites. All these nests were in old-growth Douglas-fir trees >199 cm in diameter (dbh). Only one of these nests was successful; predation is the suspected cause for failure of the other two nests. Data from these nests, along with data from other nests in Oregon and Washington, are currently being analyzed and will be presented in a manuscript on nest site characteristics of Marbled Murrelets in the Pacific Northwest.

We continued our research on murrelet vocalizations in cooperation with Steve Singer and Brian O'Donnell. We obtained new recordings of murrelet calls and purchased a computer sonagram package for creating and analyzing murrelet vocalizations. A manuscript is in preparation. Through monitoring of timber sales on Federal and State lands by numerous parties, 100 new occupied sites were located in Oregon. The state total is now 250. A new inland record was established: murrelets were detected 38 miles inland on Roseburg BLM lands.

Craig Strong conducted boat, land, and aerial surveys for murrelets along the Oregon Coast in a contract with the Oregon Department of Fish and Wildlife. Craig found that murrelets were common along the central coast and rare along the north coast. In addition, he found the distribution and densities of murrelets were highly variable on a daily and seasonal basis. These results are consistent with previous summaries of murrelet patterns along the coast.

*S. Kim Nelson  
Oregon Cooperative Wildlife Research Unit*

## California

Steve and Stephanie Singer of the Santa Cruz City Museum of Natural History, working in cooperation with David Suddjian and a team of volunteer biologists, have found another Marbled Murrelet nest in Big Basin Redwoods State Park. This year's nest was found in a different branch of the same old-growth redwood tree where murrelets nested successfully in 1991. This is the first recorded occurrence of murrelets nesting in the same tree used in the previous year. The young murrelet fledged successfully on the night of June 7, 1992.

The Santa Cruz Mountains Murrelet Group, with assistance from the Sempervirens Fund, has begun a two

## Marbled Murrelet(Continued)

year project to locate new areas of potentially suitable breeding habitat in the Santa Cruz Mountains. Old growth forest stands will be surveyed at dawn for evidence of murrelet usage. Results of the study will be presented after completion of the 1993 breeding season.

The Redwood Sciences Laboratory completed the first year of murrelet forest surveys, as part of a cooperative research project with the north coast timber industry, to examine the relationship of murrelet activity levels to stand size and characteristics at inland sites during the breeding season. Murrelet surveys were conducted by USFS personnel at 75 stands across four size categories from 10-1000 acres. Point counts for potential avian predators also were conducted and 992 counts completed. Vegetation data was collected in association with each murrelet and point count station. Murrelet surveys conducted by all cooperators will be included for analysis; the large number of surveys and sites should make a significant contribution to increasing our knowledge of murrelet use of inland forests.

Forest surveys were continued this season in a few high activity sites to collect additional information on yearly variation of behavior and activity.

Offshore surveys for murrelets and other seabirds continued during 1992. We hope to examine the data for indications of effects from the El Nino conditions which existed in northern California this year. Few juveniles were observed this season, although numbers have been small during the past four years. We used aerial surveys to count murrelets in nearshore waters for comparison with results from the boat surveys.

*C.J. Ralph and Sherri Miller, U.S. Forest Service*

### TREE NESTS

The total number of known Marbled Murrelet tree nests is now 38! These nests are located in the following States and Provinces: Alaska - 13+, British Columbia - 4, Washington - 5, Oregon - 10, California - 6.

### COMMITTEE ACTIVITIES

Committee Working Groups are in the process of completing assigned tasks. The Marbled Murrelet Survey Protocol was completed in April and mailed to all parties interested in conducting surveys for murrelets in inland forests. Final versions of the nest site sampling protocol, nest search guidelines, and disturbance accounts are due by the 1993 Annual Meeting. An educational brochure and video are currently being designed.

*Following is a news release sent to the media in the Pacific Northwest and Washington, D.C. supporting the listing of the murrelet as a threatened species.*

### The Pacific Seabird Group Supports Murrelet Listing

The Pacific Seabird Group (PSG), an international scientific organization that is dedicated to the study and conservation of Pacific seabirds and their environment, supports the listing of the Marbled Murrelet as a threatened species. Seabird biologists within PSG believe the listing is justified based on the scientific data presented on the species' selection of older forest habitat and the apparent decline throughout their historic range from Alaska to central California. PSG notes that California listed the murrelet as endangered in 1991, and British Columbia designated this seabird as threatened in 1990.

The Pacific Seabird Group has been interested in Marbled Murrelets for many years. Palmer Sekora, Chair of PSG, stated that Marbled Murrelets have been a concern of the seabird organization since 1982, when PSG passed its first resolution recommending that U.S. and Canadian forest and wildlife agencies consider the murrelet in all management plans and proposed development that could adversely impact the integrity of old-growth forests. The organization has since invited Marbled Murrelet biologists to give presentations at Annual Meetings and held a symposium on the murrelet in 1987 which has recently been published. PSG created a group called the Marbled Murrelet Technical Committee in 1986 for the purpose of outlining research needs and goals, and addressing murrelet conservation issues. The seabird organization has also worked with murrelet biologists throughout the North Pacific to develop a protocol for surveying for murrelets in inland coniferous forests. The survey protocol, which was developed from research by member scientists, was used in summer 1992 by biologists and others within state and federal agencies to monitor their timber sales for murrelets.

In the future, PSG will continue to act in a scientific capacity to outline research goals, disseminate information, and promote conservation of murrelet habitat. In February 1993, PSG will host its second symposium on the Marbled Murrelet at its 20th Annual Meeting in Seattle, Washington. For more information on PSG contact Palmer Sekora, Chair of PSG, U.S. Fish and Wildlife Service, Finley Wildlife Refuge, Corvallis, OR, (503)757-7236. For details on the 20th Annual Meeting, contact George Divoky, Chair-Elect PSG, Seattle, WA, (206)525-2131. For more information on the Marbled Murrelet contact S. Kim Nelson, Chair of the PSG Marbled Murrelet Technical Committee, Oregon Cooperative Wildlife Research Unit, Oregon State University, Corvallis, OR, (503)737-1962.



# Nominations for Officers and Regional Representatives

Nominations are being sought for officers and regional representatives to serve for 1993-94 terms. If the proposed bylaws are approved by the membership some of the regional representative positions will only serve one year. Regional representatives are required to submit at least one report per year.

If you are interested in becoming an officer of PSG please nominate yourself. If you would like to nominate a PSG member for one of the positions, please send the name and phone number of the nominee or call Doug Forsell at (410) 224-2732 during the day or (410) 626-8486 evenings.

All nominations, must be received by 1 December.

As a Pacific Seabird Group member in good standing, I wish to nominate the following:

Chair-Elect \_\_\_\_\_

Vice-Chair For Conservation \_\_\_\_\_

Secretary \_\_\_\_\_

Treasurer \_\_\_\_\_

## REGIONAL REPRESENTATIVES:

Alaska \_\_\_\_\_

British Columbia and Washington State \_\_\_\_\_

Oregon and Northern California \_\_\_\_\_

Pacific \_\_\_\_\_

Latin America \_\_\_\_\_

Submitted by: \_\_\_\_\_

---

From \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Affix  
Stamp  
Here

Doug Forsell  
PSG Elections Committee  
Chesapeake Bay Field Office  
180 Admiral Cochrane Dr., Suite 535  
Annapolis, MD 21401

---



# Other Seabird News

## The Status, Ecology and Conservation of Marine Birds of the North Pacific

Edited by

K. Vermeer, K. T. Briggs, K. H. Morgan, and  
D. Siegel-Causey

The above Symposium Proceedings, sponsored by the Pacific Seabird Group, Canadian Wildlife Service, and the British Columbia Ministry of Environment, Lands, and Parks, will be published by the Canadian Wildlife Service as a Special Publication early in 1993. All current PSG members will receive one free copy of the Proceedings; the remaining copies will be distributed by the Canadian Wildlife Service for free upon request. The contents of the Proceedings are as follows:

### Part I Bird distribution at sea as determined by physical and biological processes.

1. SHUNTOV, V.P. Biological and physical determinants of marine bird distribution in the Bering Sea.
2. HUNT, G.L. JR., N.M. HARRISON AND J.F. PIATT. Diets and the selection of foraging habitat by planktivorous auklets in the Bering Sea.
3. GOULD, P.J. AND J.F. PIATT. Seabirds of the Central North Pacific.
4. WAHL, T.R., K.H. MORGAN AND K. VERMEER. Seabird distribution off British Columbia and Washington.
5. TYLER, W.B., D.B. LEWIS, K. T. BRIGGS AND R.G. FORD. Seabird distribution and abundance in relation to oceanographic processes in the California Current System.
6. DUFFY, D.C. Stalking the southern oscillation: environmental uncertainty, climate change and North Pacific seabirds.

### Part II Status, ecology and conservation of nesting and visiting seabirds.

1. McDERMOND, D.K. AND K.H. MORGAN. Status and conservation of North Pacific Albatrosses.
2. HATCH, S.A. Ecology and population status of Pacific Northern Fulmars (*Fulmarus glacialis*).
3. EVERETT, W.T. AND R.L. PITMAN. Status and conservation of shearwaters of the North Pacific.

4. BARTLE, J.A., D. HU, J.C. STAHL, P. PYLE, T.R. SIMONS AND D. WOODBY. Status and ecology of gadfly petrels in the temperate North Pacific.
5. BOERSMA, P.D. AND M.J. GROOM. Conservation of storm-petrels in the North Pacific.
6. SIEGEL-CAUSEY, D. AND N.M. LITVINENKO. Status, ecology and conservation of shags and cormorants of the temperate North Pacific.
7. VERMEER, K., D.B. IRONS, E. VELARDE AND Y. WATANUKI. Status, conservation and management of nesting *Larus* gulls in the North Pacific.
8. HATCH, S.A., G.V. BYRD, D.B. IRONS, AND G.L. HUNT JR. Status and ecology of kittiwakes (*Rissa tridactyla* and *R. brevirostris*) in the North Pacific.
9. CLAPP, R.B., P.A. BUCKLEY AND F.C. BUCKLEY. Conservation of temperate North Pacific terns.
10. EWINS, P.J., H.R. CARTER AND YU. V. SHIBAIEV. The status, distribution and ecology of inshore fish-feeding alcids (*Cepphus* guillemots and *Brachyramphus* murrelets) in the North Pacific.
11. BYRD, G.V., E.C. MURPHY, G.W. KAISER, A. YU. KONDRATYEV AND YU. V. SHIBAIEV. Status and ecology of offshore fish-feeding alcids (murrelets and puffins) in the North Pacific.
12. SPRINGER, A.M., A. YU. KONDRATYEV, H. OGI, YU. V. SHIBAIEV AND G.B. VAN VLIET. Status, ecology and conservation of *Synthliboramphus* murrelets and auklets.

### Part III Environmental hazards to seabirds.

1. DEGANGE, A.R., R.H. DAY, J.E. TAKEKAWA AND V.M. MENDENHALL. Losses of seabirds in gillnets in the North Pacific.
2. SIEVERT, P.R. AND L. SILEO. The effect of plastic ingestion on growth and survival of albatross chicks.
3. BAILEY, E.P. AND G.W. KAISER. Impacts of introduced predators on nesting seabirds in the North-east Pacific.
4. LITVINENKO, N.M. Impact of human disturbances and introduced predators in the Northwest Pacific.
5. OHLENDORF, H.M. Marine birds and trace elements in the temperate North Pacific.
6. ELLIOTT, J.E. AND D.G. NOBLE. Chlorinated hydrocarbon contaminants in marine birds of the temperate North Pacific.
7. BURGER, A.E. AND D.M. FRY. Effects of oil pollution on seabirds of the temperate North Pacific.

Kees Vermeer

### NOTICE TO INDIVIDUALS CONDUCTING RESEARCH IN THE NORTH PACIFIC

Because of a drastic population decline, the Steller sea lion has been listed as a threatened species under the Endangered Species Act. To reduce human disturbance, the National Marine Fisheries Service (NMFS) has placed restrictions on land and water approach in the vicinity of Steller sea lion rookeries in the Bering Sea, Aleutian Islands, and the Gulf of Alaska. These prohibitions apply to all individuals and activities unless specifically exempted by NMFS. For further information regarding Steller sea lion regulations, contact NMFS, Protected Resources Management Division, P. O. Box 21668, Juneau, AK 99802, (907) 586-7235.

### Marbled Murrelet Bibliography Available

A Marbled Murrelet Bibliography compiled by Steve Speich is now available to PSG members. If you would like to have a copy, just send a 5 1/2 or 3 1/4 inch disk to Steve at his home address:

4720 N. Oeste Place  
Tucson, AZ 85749

Steve will return your disk with the bibliography in an ASCII, Wordperfect, or AmiPro file. Also, if you have any additional citations, please send them to Steve so that he can include them in the bibliography.

## Endowment Fund Receives Donation \$\$\$\$\$\$\$\$\$\$\$\$

The PSG Endowment Fund is some \$900 dollars richer thanks to a PSG member who sent their Alaska Permanent Fund dividend to the PSG Treasurer. The Group thanks this individual for their generosity and for suggesting that other Alaska residents may want to consider doing likewise with their dividend checks. Alaska's Permanent Fund was established with revenue from the Trans-Alaska Pipeline. The benefactor made the point that these funds come directly from industry activities in Alaska and that it seems appropriate that what is essentially a windfall for most Alaskans be donated to an organization working on seabird research and conservation. Like many Alaskans, Alaska PSG members (in-

cluding a number of highly paid professors and government biologists who make their living studying the impacts of industry on Alaskan wildlife) frequently use Permanent Fund Dividend checks for a mid-winter escape to Hawaii. These researchers and administrators may want to consider designating at least a part of one of their family's dividend checks for the PSG Endowment Fund and make up the difference by limiting their helicopter tours of the Haleakala volcano. PSG's Endowment Fund was created to provide revenue for publication of symposia. Donations to the fund can be sent to Ken Warheit, PSG's Treasurer, whose address is on the back cover of the Bulletin.



### Status and Conservation of the Marbled Murrelet in North America

Harry R. Carter and Michael L. Morrison  
Editors

Papers in this new volume dedicated to the Marbled Murrelet include *Distribution, breeding records, and conservation problems of the Marbled Murrelet in Alaska*, V. M. Mendenhall, *Status of the Marble Murrelet in British Columbia*, M. S. Rodway, H. R. Carter, S. G. Sealy, and R. W. Campbell, *Breeding records, inland distribution, and threats of the Marbled Murrelet in Washington from 1905 to 1987*, L. L. Leschner and E. B. Cummins, *The numbers of Marbled Murrelets in Washington marine waters*, S. M. Speich, T. R. Walh, and D. A. Manuwal, *The Marbled Murrelet in Oregon, 1899-1987*, S. K. Nelson, M. L. C. McAllister, M. A. Stern, D. H. Varoujean, and J. M. Scott, *Status and Conservation of the Marbled Murrelet in California, 1892-1987*, H. R. Carter and R. A. Erickson, *Use of an inland site in northwestern California by Marbled Murrelets*, P. W. C. Paton, C. J. Ralph, and R. A. Erickson, *Techniques for capture and radio-tagging Marbled Murrelets*, S. E. Quinlan and J. H. Hughes, and *Marbled Murrelet Bibliography*, S. M. Speich (compiler).

The Western Foundation of Vertebrate Zoology is offering Pacific Seabird Group members a special discount on the purchase of this volume at \$14 per issue. The Foundation will check the updated membership list for you current status. If you are not a member or your membership has lapsed, it will be worth your while to send in your annual dues and establish your membership status. The non-PSG price is \$20.

To order, send a check or money order to

Western Foundation of Vertebrate Zoology  
439 Calle San Pablo  
Camarillo, CA 93010

Make checks payable to Western Foundation of Vertebrate Zoology. Shipping and handling is included in the purchase price.

### ALASKA SEABIRD MANAGEMENT PLAN RELEASED

The United States Fish and Wildlife Service has recently released its Alaska Seabird Management Plan. Copies may be obtained from

Public Affairs Office  
U. S. Fish and Wildlife Service  
1011 East Tudor Road  
Anchorage, Alaska 99503

### Seabird Proceedings Still Available

Cooper, J. (ed.). 1981. *Proceedings of the Symposium on Birds of the Sea and Shore, 1979*. Cape Town: African Seabird Group. 474 pp. ISBN 0 620 06354 8.

This volume contains 27 papers on both charadriid waders and seabirds, including Arctic Skuas, Common Terns, cormorants, Gentoo Penguins, Giant Petrels, and prions. Subjects included in the proceedings range from diets and foraging methods of procellariiform seabirds to interactions between seabirds and commercial fisheries.

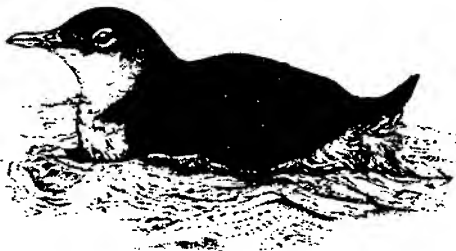
To clear stocks, the African Seabird Group is offering the Proceedings as a specially reduced price, inclusive of packaging and surface mailing, of UK Pounds 10 or US Dollars 20.

Checks should be made payable to the African Seabird Group and sent to P. O. Box 34113, Rhodes Gift 7707, South Africa. Personal checks or cash well-sealed in an envelope are both acceptable. Write to the same address for information on joining the African Seabird Group. Members receive its journal, *Marine Ornithology*, as well as special offers on back issues of the journal.

### Colonial Waterbird Society Meeting October 1992

The Colonial Waterbird Society (CWbS) met at the University of Mississippi in Oxford, Mississippi October 14-18. The meeting featured a symposium entitled "The Double-crested Cormorant: Biology, Conservation, and Management" and included thirty-five papers in six subject areas: population history; population dynamics; feeding ecology; fisheries and aquaculture; cormorant and human interactions; and policy, management and future research. While the emphasis was on eastern and midwest populations, Harry Carter presented a multi-authored paper on the status of the Double-crested Cormorants on the Pacific coast. The proceedings of the symposium are to be considered for publication as a supplemental issue of Colonial Waterbirds. The increase in the number and extent of catfish farms in the southeast has increased the potential for aquaculture/cormorant conflicts and the symposium provided a forum for the current knowledge state. David Nettleship and Chip Weseloh are to be congratulated for having organized a large but interesting symposium and pulling together papers from cormorant researchers, agency biologists, and administrators, and catfish farmers. Most PSG members will want to have the publication resulting from the symposium and, should you not be a member of the CWbS, this would be a good time to join. The CWbS treasurer is Robert Baker, 8096 River Bay Dr. West, Indianapolis, IN 46240-2988 (317-849-5789).

The remainder of the scientific program included nineteen papers on gulls and terns, fourteen on long-legged waders, and one on alcids. In 1993 the CWbS will meet in France and the organizers have funds to assist graduate students with travel expenses (another good reason to join the Society or return to school). See the following announcement. David A. Shealer and John N. Brzorad shared the best student paper award. Each received a year's PSG membership in a reciprocal arrangement between the two societies.



### STUDENT TRAVEL AWARDS FOR 1993 COLONIAL WATERBIRD SOCIETY MEETING IN ARLES, FRANCE

Travel awards of no less than \$600 US are available for North American students (AOU definition) planning to present papers at the 1993 CWbS meeting in Arles, France (6-10 October). The meeting, set in the Camargue region of southern France, promises to have wide international attendance and will feature a number of symposia on the conservation and ecology of colonial waterbirds. Funds will be competitively awarded to no more than ten students on the basis of scientific merit of the student's research, as reflected in an expanded abstract of no more than 300 words. Interested students must be members of the CWbS by the time of the application and should send expanded abstracts by 30 April 1993 to Peter Frederick, Dept. Wildlife and Range Sciences, 118 Newins-Ziegler Hall, University of Florida, Gainesville, FL 32611 USA (phone: 904-392-1850). For further information about the meeting contact Frank Cezilly, Station Biologique de La Tour du Valat, Le Sambuc, 13200 Arles FRANCE. Funds for these awards are made available by the Station Biologique de La Tour du Valat.

### PSG Expedition to Graceland

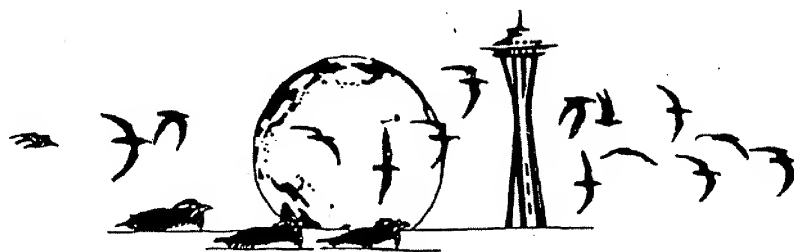
Those people who attended the banquet at the 1992 annual meeting may remember a report that Elvis had been reincarnated as a Marbled Murrelet and was currently part of a telemetry study. The researcher who attached the transmitter reported that Elvis was rather uncomfortable with his recent incarnation. In his last life he was such a media sensation that he was constantly surrounded by people who hoped to gain wealth merely by being associated with him. Now, as a Marbled Murrelet, he feels he has the same problem.

In part because of this report, two PSG members traveled from the Colonial Waterbird Society meeting in Oxford, Mississippi to Memphis, Tennessee to visit Graceland. The tour of Graceland was impressive, although both PSG members were disappointed when they found out that what they had believed was a tour of the Medication Garden turned out to actually be a tour of the Meditation Garden. Even so, the two recommend the Graceland tour to anyone who happens to be near Memphis and has the slightest interest in popular culture.



## TWENTIETH ANNUAL MEETING

### *Pacific Seabird Group*



TWENTIETH ANNUAL MEETING  
SEATTLE, WASHINGTON  
FEBRUARY 9-13, 1992

The Twentieth Annual Meeting of the Pacific Seabird Group will be held at the Westin Hotel in Seattle, Washington from 8-13 February 1993. A meeting announcement and call for papers was mailed in early November. If you did not receive an announcement, please contact the head of the Local Committee, Lora Leschner, Department of Wildlife, 16018 Mill Creek Blvd., Mill Creek, WA 98102 (phone: 206-774-8812) or the Program Chair, George Divoky, 10535 Interlake N., Seattle, WA 98133 (phone 206-525-2131).

A list of currently scheduled events is presented below. Symposia on Washington State seabirds, the Exxon Valdez oil spill, and the Marbled Murrelet are planned. Workshops of PSG committees as other special interest groups will be held during the meeting. These will include meetings of the Conservation Committee, the Standing Committee on Colony Monitoring, and the Marbled Murrelet Committee. Small group discussions on introduced predators and guillemots will also be held. Persons wanting to suggest or organize other small group discussions should contact the Program Chair.

This will be the twentieth annual meeting of PSG and the accomplishments and activities of Group will be featured in talks and social events. We urge all people who have played a role in PSG's first two decades to attend the meeting.

### Daily Schedule

#### Monday 8 February

Preconference meetings - open to all interested parties  
Marbled Murrelet Technical Committee  
Seabird Database Management

#### Tuesday 9 February

Registration and Executive Council Meeting  
Welcoming reception in evening

#### Wednesday 10 February

Papers sessions morning and afternoon  
Reception at the Seattle Aquarium in evening

#### Thursday 11 February

Paper sessions in morning  
PSG committee meetings in afternoon  
Reception and banquet in evening

#### Friday 12 February

Paper sessions morning and afternoon  
Poster papers and reception in early evening  
Public session with Seattle Audubon in evening

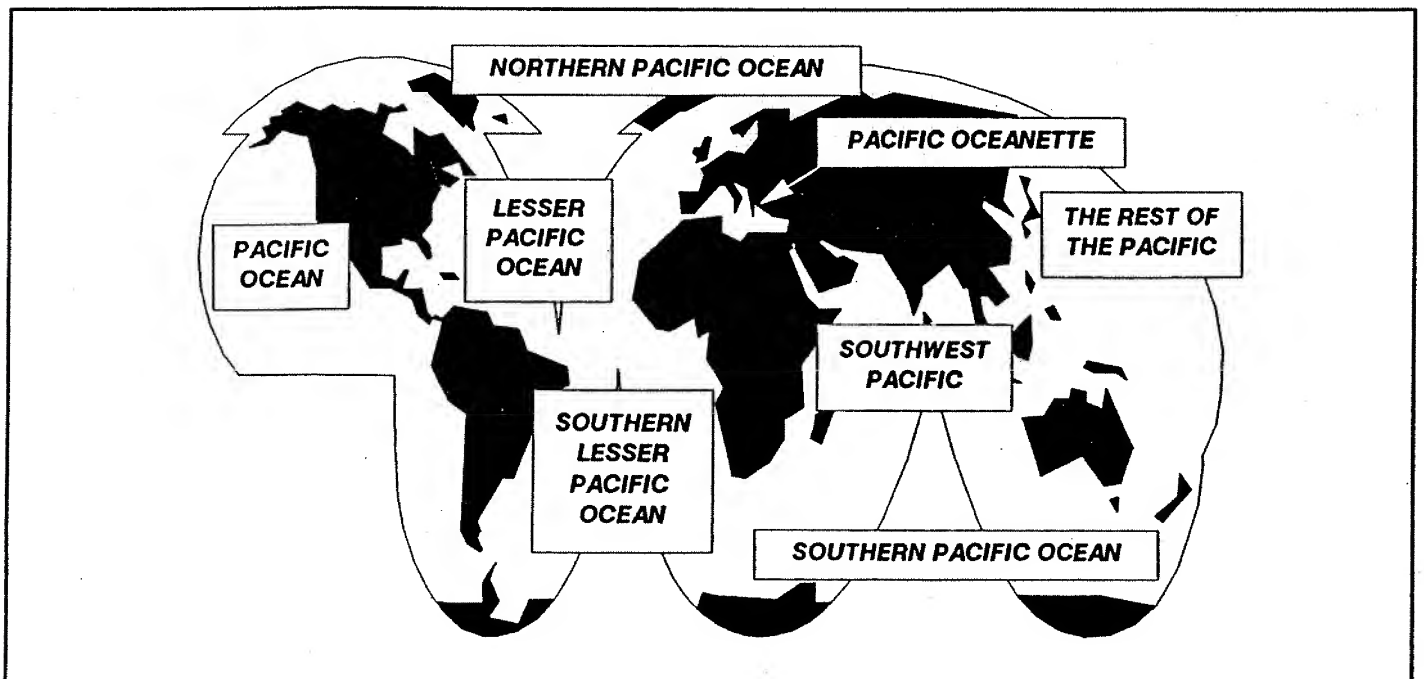
#### Saturday 13 February

Cruise on Puget Sound morning and afternoon

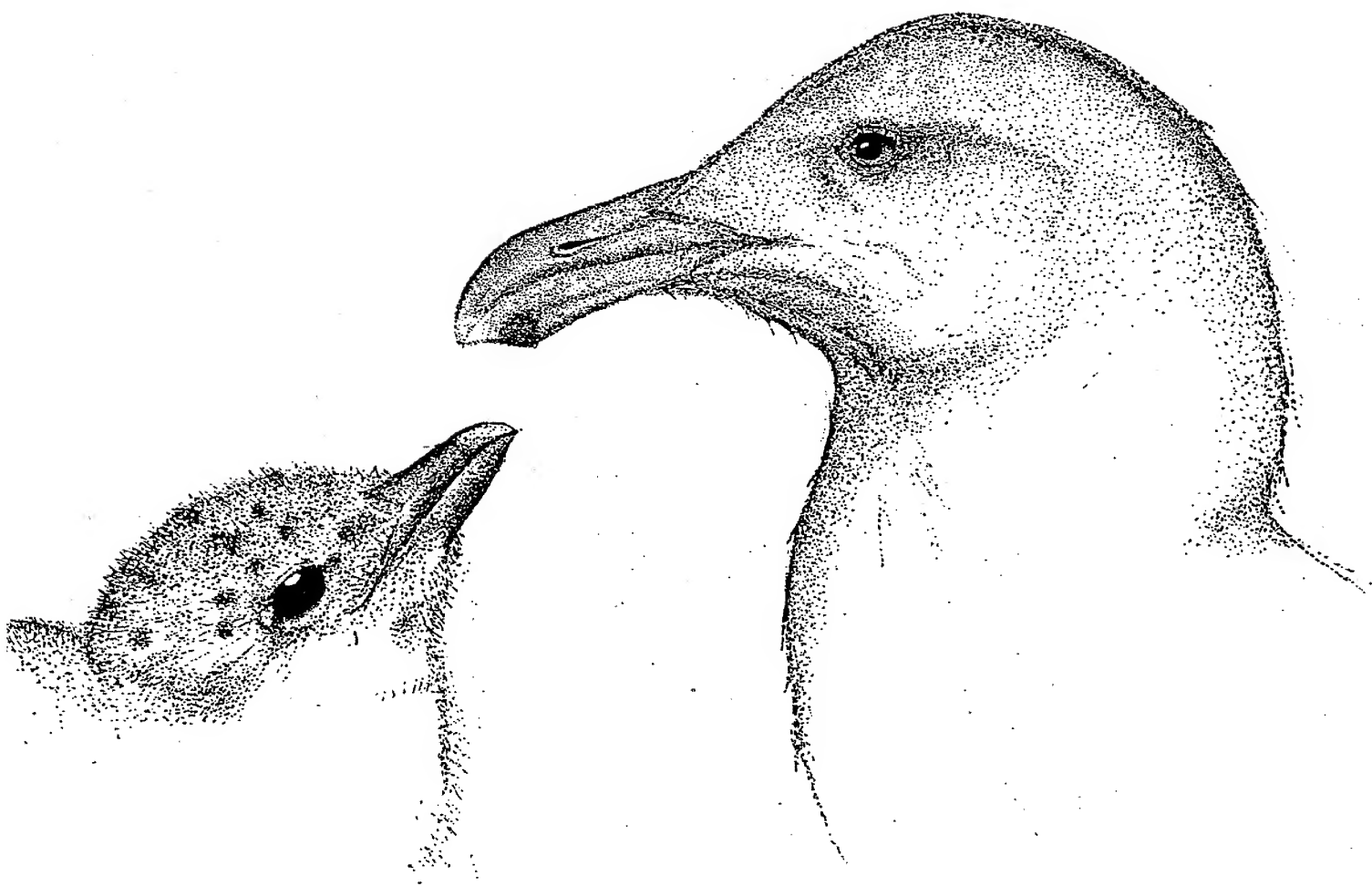
## OCEAN NAMES

There has long been a feeling that the media is run by the Eastern Establishment and thus much of what is presented in the mass media reflects the biases of that Establishment. However, evidence of this bias is typically lacking, and people who suspect such a bias are usually accused of being paranoid. For this reason, the off-white literature editor was heartened to find an article in the April 23rd 1989 *New York Times* travel section that included the following map of Portland-Seattle area.

Because the *New York Times* is very good about printing corrections, yet never tried to correct the map, the PSG believes that designating the ocean west of Oregon and Washington as the Atlantic Ocean is simply a small step in a program that will increase the public's perception of the size of the Atlantic Ocean. This program could obviously have dire consequences for the Pacific Seabird Group since much of what is considered PSG's region of concern may soon be considered part of the Atlantic Ocean. In order to confront the changing geographic boundaries demonstrated by the *NY Times* map, an unofficial PSG working committee proposes renaming the world's oceans as in the map below.









# PACIFIC SEABIRD GROUP EXECUTIVE COUNCIL 1992

## OFFICERS

Chair	Palmer Sekora, USWFS, 2640 E. Wilshire, Eugene, OR 29802 (503) 757-7236 FAX (503) 757-4450
Chair Elect	George Divoky, 10535 Interlake Ave. N., Seattle, WA 98133 (206) 364-2896 FAX (206) 368-8941
Vice-Chair for Conservation	Craig S. Harrison, 4001 North 9th Street, Arlington, VA 22203 (202) 778-2240 FAX (202) 778-2201
Treasurer	Ken Warheit, 8205-E Martin Way NE, Suite 238, Olympia, WA (206) 491-2046 FAX (206) 438-9689
Secretary	Beth Flint, USFWS, 300 Ala Moana Blvd., Rm. 5302, P.O. Box 50167, Honolulu, HI 96850 (808) 541-1201 FAX (808) 541-1216
Editor	Martha Springer, 1708 Marmot Hill Road, Fairbanks, AK 99709 (907) 479-8006
Past Chairs	Malcolm Coulter, P.O. Box 48, Chocorua, NH 03817 Phone and FAX (603) 323-7730 Doug Siegel-Causey, Museum of Natural History, Univ. Kansas, Lawrence, KS 66045 (913) 864-4540 FAX (913) 864-5335 Michael Fry, Dept. of Avian Sciences, Univ. Calif., Davis CA 95616 (916) 752-1201 FAX (916) 752-8960

## REGIONAL REPRESENTATIVES

Alaska	Joel Hubbard, Minerals Management Service, 949 E. 36th Ave., Room 110, Anchorage, AK 99508 (907) 261-4670 FAX (907) 561-4860
British Columbia and Washington	George J. Divoky, 10535 Interlake Ave. N., Seattle, WA (206) 364-2896 FAX (206) 368-8941
Oregon and N. California	Roy Lowe, USFWS, 2030 S. Marine Science Dr., Newport, OR 97365 (503) 867-0270 FAX (503) 867-0105
Central California	Jean Takekawa, San Francisco Bay NWR, Box 524, Newark, CA 94560 (415) 792-0222 FAX (415) 792-5828
S. California	Kathy Keane, 319 University #C, Costa Mesa, CA 92672 (714) 650-0654
Latin America	Enrique Velarde, Inst. de Biologia-Omitologia, UNAM, Apdo. Postal 70-153, 04510 Mexico, D.F.
Pacific Region	Ken McDermond, P.O. Box 50167, Honolulu, HI 96850 (808) 541-1201 FAX (808) 541-1216 FTS 551-1201
Inland	James Lovvorn, Dept. of Zoology and Physiology, University of Wyoming, Laramie, WY 82071 (307) 766-6100 FAX (307) 766-5625
Great Lakes	James Ludwig, 2395 Huron Parkway, Ann Arbor, MI 48104 (313) 677-0050 FAX (313) 677-0055
Northeast	Mark Tasker, Nature Conservancy Council, 17 Rubislaw Terrace, Aberdeen AB1 1XE, United Kingdom (UK) 0224-642863 FAX (UK) 0224-643347
Southeast	Roger Clapp, National Fish and Wildlife Laboratory, National Museum of Natural History, Washington, D. C. 20560 (202) 357-1972 FAX (202) 357- 4770 FTS 357-1972

## DELEGATES TO THE INTERNATIONAL COUNCIL FOR BIRD PRESERVATION

Malcolm Coulter, address above  
Craig S. Harrison, address above